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COLLEGE STUDY SKILLS: A COURSE FOR GIFTED PUPILS
SMOKING ON SCHOOL GROUNDS
ADMINISTRATIVE OBJECTIONS TO MENTALLY RETARDED PROGRAMS
THE GERMAN "GYMNASIUM"
CURRENT EVENTS AND MATERIALS IN BUSINESS EDUCATION

A SYMPOSIUM ON
NEW DIRECTIONS FOR HIGH SCHOOL EDUCATION

Next Month a Symposium on
MODERNIZING HIGH SCHOOL MATHEMATICS

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A SYMPOSIUM NEXT MONTH ON
MODERNIZING HIGH SCHOOL MATHEMATICS

The *California Journal of Secondary Education* is published by the California Association of Secondary School Administrators eight months during the year and is issued in the calendar months of October to May, inclusive. Subscription is $4.00 per year; single copies, 60 cents. Annual subscriptions in all countries in the International Postal Union, $4.50. Subscribers are requested to report at once any change of address, giving old as well as new addresses. Entered as second-class matter at the post office at Berkeley, California, under the Act of March 3, 1879. Address all business correpondence and requests for subscriptions or copies to *California Journal of Secondary Education*, 220 Bancroft Way, Berkeley 4, California. Subscription to the *California Journal of Secondary Education* is $4.00 per year. Group subscriptions for joint faculty or organization use or for college classes are also accepted if a minimum of 25 percent of the faculty or group subscribe, at the rate of $2.50. To purchase microfilm volumes, write University Microfilms, Ann Arbor, Michigan.

EDITORIAL

NEW DIRECTIONS FOR HIGH SCHOOL EDUCATION

At this most critical juncture in the history of American education, the *Journal* takes for its theme "Re-assessing the High School Curriculum." The symposiums for each month will be:

October 1958–New Directions for High School Education
November 1958–Modernizing High School Mathematics
December 1958–Changes Needed in High School Science
January 1959–Reforming High School Foreign Languages
February 1959–A Critique of High School Social Studies
March 1959–Changes Needed in the Teaching of High School English
April 1959–Basic Education for All in the Visual and Performing Arts
May 1959–Reconsideration of the Extracurriculum

This theme and series of symposiums for the *Journal* have been selected this year to promote vigorous, penetrating scrutiny of the content of high school education. Are we as bad–or as good–as critics or supporters contend? Teachers, administrators, and board members are invited to use these symposiums during the year as a basis for local discussion with citizens' groups throughout the community in order that the educational program of the high school may be strengthened in each community.

The first symposium this month takes an overall approach to the problem, and suggests some promising new avenues to consider. In succeeding months, the whole range of the high school curriculum will be considered, with the exception of the practical and vocational arts and physical education, which were treated in 1957–58.

The symposium in each special field is not planned just, or even mainly, for the teachers who teach that particular subject, but more for the purpose of promoting a discussion with others who teach, administer, or establish policy and form public opinion in the community. In each field, such questions of common concern as these will be treated:

- How much, and what, in this subject should be required for high school graduation?
- How can we tell whether or not the outcomes aimed for have been achieved?
- What should be eliminated and what new kinds of courses should be provided to meet individual differences?
- What research should be undertaken to shed light on the most pressing unanswered questions in the subject field under consideration?

- What does research about learning say concerning the curricular offering and its manner of presentation in each subject field?
- How should a teacher be properly prepared to teach in each subject field?

After each of the subject fields has been considered, a final symposium will be devoted to an analysis of the extracurriculum. This segment of the educational program has been developed more extensively in the United States than in any other part of the world. It is costly, it has added to the teacher's load. It has contributed substantially to the holding power of the high school, and those who participate appear also to benefit scholastically. But the question has been raised as to whether or not the extracurriculum has expanded to the point where, in the language of the circus, the sideshow has overshadowed the main event. The final symposium will attempt to analyze this problem so that local schools may determine the direction for their own sound development.

The evidence continues to point to an unmistakably quickening tempo of change in New Directions for High School Education. That these New Directions shall be not trivial, not capricious, but rather soundly based, is essential. To contribute to this end, the *Journal* has fashioned its program for 1958–59 under the theme of Re-assessing the High School Curriculum.

R. N. B.

THE JOURNAL'S NEW FORMAT

In keeping with the trends of fashion this fall the *Journal* too has its NEW LOOK. By action of the Editorial Board and the Executive Board of the Association, the *Journal* has been redesigned both inside and out. To artist Nancy Burbank Sears and consultant C. E. Persons and to the staff of Stanford University Press who manufacture the *Journal* we express our appreciation for their contribution to the newly designed *Journal*.

COLLEGE STUDY SKILLS: The Development of a Course for the Gifted

BY EDMUND J. FARRELL*

At least partially motivated by the "Are-we-doing-right-by-our-gifted?" sense of guilt that seems to pervade educational groups these days, the administrators of my high school called me into a conference a year ago last spring for a dual purpose: to determine whether I shared the culpability and to offer, if I did, an opportunity to expiate the sins of the past by creating, at least for the present, a high-level, one-semester course in critical thinking.

I confessed to the group that I, too, felt that whereas all of our brighter graduates seemed to be going onward, not many appeared to be winging upward. I further said that as a teacher of English, I would appreciate the challenge of presenting a course in critical thinking to a group of superior students. My only request would be three-fold: freedom to devise the course, money to buy texts, and the right to limit the class to sixteen students.

The request granted, the first problem was to select a course title. While this might seem a matter of small import, it wasn't. Scheduling of classes for the fall is done in the spring; the new course was to be an elective, and somehow with the counselors' aid I had to inveigle interest at a time of year when, gifted or not, students were turning their fancies elsewhere.

Summoning together all of my past experience in advertising (I had once been publicity director for a county fair and had written a story on zucchini they're still raving about), I decided to call the new offering

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College Study Skills. With the song of the sirens shrilling and students clamoring for *in*, I then retired to decide what it was specifically I wished to teach.

College Study Skills. What had I wrought? My title was an omnibus; my time but a semester. Recalling both my own college days and the difficulties therein as well as the post-graduate remarks of ex-students of mine, I decided that the time might be spent quite profitably on that which most often incubates critical thinking—critical reading.

But, to be more specific, reading what? And by whom? And for what? Slowly the course began to come into focus.

I remembered a stimulating approach to critical reading suggested by Edward Tinney and Ralph Wardel in *A Primer for Readers*[1] a book that had been read some time back. I next recalled an interesting text for college freshmen which had been read recently, *Reader & Writer*, edited by Harrison Hayford and Howard Vincent.[2] Maybe if the approach could be wedded to the text, the sixteen would be better able in college to cope with the vagaries of teachers of freshman comp. Besides, I would have met needs. No fault-finding finger could wave down from campuses upon my bailiwick.

The more I considered a semester course in depth reading, the more the onus of guilt about the gifted began to diminish. And I want it here recorded that since the course went into the classroom before Sputnik went into the atmosphere, our school stands vindicated.

After purchasing the texts, I settled down to a summer of analytical reading—underlining here, questioning there, commenting everywhere. (One of many useful essays in *Reader & Writer* is Mortimer Adler's "How to Mark a Book.") Finally, a syllabus was prepared listing forty-eight essays which the students were to read from the text, essays with a wide range in both style and difficulty of content—from Robert Benchley's "What College Did for me" to John Dewey's "Language and the Training of Thought."

Because of a desire to increase both scope as well as depth of reading, I also indicated on the syllabus that, in addition to the assigned essays, students would be expected to read a minimum of two, and preferably three, essays a week outside of class from such magazines as *Harper's, Atlantic Monthly, Saturday Review*, etc. Essays assigned in class and essays read outside of class were to be analyzed in the same manner.

Next, a form was devised for the analysis of each essay. On the form the student was to write his name, the title, and the author of the essay, the source from which it was taken, the date of its publication, and its

[1] New York: Appleton-Century-Crofts, 1942, 158 pp.

[2] Boston: Houghton Mifflin, 1954, 596 pp.

page numbers. I wanted to prevent students distorting content by relating the author's experience to their own in such a way that the outline would emerge as a synthesis of their thinking rather than that of the author. Consequently, they were directed to outline in the *author's words* the main ideas found in the essay. We would save for the classroom any discussion of the provocative points found in the article.

This basic outline was to be modified and supplemented whenever certain aspects of the critical reading process were to be emphasized. For example, if the author's intent could be understood only with an acute awareness of the historical context in which the essay was written, the students were to indicate after the outline the historical data necessary for an understanding of purpose. Or if the essay could be read intelligently only with an awareness of the audience for which it was created, then comments to this effect were to be appended to the outline. In other words, the students were to maintain an awareness of *who* was writing *what* to *whom, how, where, when,* and *why.*

Only when I felt that they had read widely and deeply enough were they to be turned out on their own to précis articles. For this purpose, I reserved the last ten essays to be read from the text, the ten most difficult essays. If they could recapitulate in their own words the ideas found in such articles as James Harvey Robinson's "Four Kinds of Thinking," John Ciardi's "What Does It Take to Enjoy a Poem?" or John Dewey's "Language and the Training of Thought," then they were well on their way toward becoming the kind of readers not only gifted but all bright children should be.

So much for my summer planning. As I anticipated, when we met in the fall, the students didn't know quite what to expect from a course entitled *College Study Skills.* Each had different expectations for the class. True to an earlier resolve of mine, we started with a discussion of the problems that arise from projecting meaning into abstractions. I indicated that the title of the course was merely a grouping of *symbols* which had no meaning of any by themselves. The course might just as well have been entitled "Sollege Ctudy Ksills," *so long as we agreed to a meaning of terms.* Since we had not yet come to such an agreement, *referents,* namely the relations or objects which the grouping of symbols called to our minds, were different for each of us.

This short discussion led to a further and fuller discussion of principles of semantics and to the first readings in the text: Carroll's "Jabberwocky" and "Humpty Dumpty on Words"; Hayakawa's "Symbols" and "The Language of Reports."

For a time they struggled in their attempts to find the author's principal ideas and purpose. I wanted them to. Slowly, appreciation for form began to emerge in the outlines; only then did we explore the importance

of locating the thesis and the topic sentences in attempting to analyze structure.

Likewise, only after they felt skeptical toward ideas being advanced in some of the essays, but uncomfortable with their inability to fix their intellect on the place where the reasoning went awry, was a unit on fallacies of equivocation and unwarranted assumption introduced. I prepared a seven-page brochure which they studied intently, which they related to their reading (and, unfortunately, I learned at P.T.A. meetings, to arguments heard at home), and which they were tested upon.

And this brings me to the kinds of evaluation that take place in a course of this nature. First of all, the student gets at least two marks a week on the analysis of his readings: one mark for the essays read in the text, the other for the essays read outside of class.

At the beginning of the term I was collecting and analyzing closely almost six essays a week for each student. Obviously, though it was important to get the class off to a good start, I couldn't keep up this kind of pace. The students, themselves, provided a solution: they suggested that on Fridays I call for only one of the three outlines made of the essays read in the text during the week. They would never know which essay I would request, and there would be a standard of measurement in that I would be reading from each of them the outline of the same essay. They further suggested that on Mondays they turn face downward on their desks the three outlines of outside essays read during the week and that I select only one of these three for appraisal.

Secondly, I have administered objective tests on the essays read in the text. The questions have been of the multiple-choice, true-false, passage-identification type, for these kinds of questions have allowed me to test the care with which the students have read.

Thirdly, the students have written essay tests in which they have had to indicate their ability to relate ideas. In fact, the final examination in the course was a take-home test which posed five problems, any two of which the student, calling into play any of the reading done in the course, could choose to evaluate. Or, if he desired, the student could, with my approval, substitute for one of the assigned problems an investigation into an area which was of particular interest to him.

Most of the reading done in the course, both in and outside the text, either dealt directly with or through discussion was related to contemporary issues. Here, I felt, was one of the strengths of a course which placed heavy emphasis upon reading periodical literature of quality; for while the assigned readings in the text might remain somewhat static from year to year, the issues in the culture would emerge dynamically in current magazines. The students could thus observe constant inter-action between moribund, prevailing, and emerging concepts in the culture; fur-

thermore, the course content would forever remain to some extent "fresh" for the instructor.

As a consequence of stress upon contemporary issues, the problems for student evaluation, given to the class four weeks before the end of the semester, took the following form: (1) "What is 'science' and what are its processes? What are science's promises for the future? What are its obligations to the present?" (2) "What are the forces which are tending to make us conformists? In view of these forces, how may we best preserve individual freedom in a mass society?" (3) "What is 'language' and how does it affect our behavior socially, psychologically, and intellectually? In what ways can we educate people to better understand and more ably use written and oral communicative processes?" (4) "What is, and what should be the role of the artist (musician, painter, writer) in our society? What responsibilities, if any, has the society to the artist; and what obligations, if any, has the artist to the society?" (5) "What are the principal criticisms now being made against American education? What values of our society should we bear in mind when evaluating these criticisms? How, then, in the light of whatever values we wish to preserve, may we strengthen our present educational system?"

The course is long over now for the original group of students and is in process for another. Along the way we'll examine, as we did before, J. N. Hook's "How to Write Better Examinations";[3] we'll have some experience in note taking; we'll study, all too briefly, fallacies and semantics; we'll have some lively discussions, and we'll read. Then we'll read some more. And some more.

And how do the students take to all this? They mumble and grumble and they think it's great. In fact, at the end of the first semester they were a sorrowful sixteen, expressing the desire that the class be extended into a year course. I thanked them but dissented. I was afraid that I wouldn't be able to think of a title for the second semester.

[3] *College Outline Series,* No. 36. New York: Barnes & Noble, 1941, 32 pp.

THE GERMAN "GYMNASIUM"

BY STANLEY L. COMBS*

On a sabbatical leave from the University of Redlands to study secondary teacher education in western Europe, I visited secondary schools of all types in Denmark, Sweden, Norway, Germany, and Austria. During October, November, and December I was especially fortunate to visit many German *Gymnasia*—generally considered comparable to American high schools and junior colleges. Seeing these schools and observing the teaching in such places as Bad Godesberg, Bonn, Düren, Grevenbroich, Düsseldorf, Hannover, Berlin, Heidelberg, Darmstadt, Jugenheim, Frankfurt, and Weisbaden, I was able to form a fairly complete picture of a German *Gymnasium*.

To begin, a German *Gymnasium* is not comparable with a United States high school. Children are generally admitted to a *Gymnasium* when they are ten years of age (after four years in an elementary school), and the course of instruction usually lasts for nine years. The student is nineteen or twenty, therefore when he takes the graduation examination (*Abitür*). In general, chidren seeking to enter the *Gymnasium* undergo some sort of selective process so that the intellectually gifted may be chosen, and according to statistics from Weisbaden, only 15 per cent of all German children enter the *Gymnasium*. Obviously, then, the students are at the outset more carefully selected than are American high school students, since our aim is for *all* American youth to attend high school. In the United States 70 per cent of our youth finish high school and about 40 per cent attend universities or colleges. Of the 15 per cent of German youth who attend the *Gymnasium*, about one-fifth (or 3 per cent) enter universities. Selection of German youth to attend the *Gymnasium* used to be based primarily

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on passing an entrance examination, plus recommendations of elementary teachers and previous school records. Today there is a slight tendency by some of the *Länder* to use objective tests of all kinds and intelligence tests in helping to ascertain the child's ability to do work in the *Gymnasium*. This is rare, however. The usual means for determining the ability of the candidate is through the observation of the child by elementary and secondary teachers in a week's trial period of instruction. The first year in the *Gymnasium* is also generally considered one of trial or probation when errors in selection may be rectified. From observation I found there is a very large drop-out of children each succeeding year after they begin the *Gymnasium*. This was apparent in the size of the classes, called forms.[1] In the lower forms, there were as many as forty-five ten-, eleven-, or twelve-year-olds, but in the upper forms there were generally no more than twenty seventeen-, eighteen-, or nineteen-year-olds. Many elementary teachers and a few secondary teachers feel that a child of ten, even with the guidance of his parents and possible use of objective tests, is much too young to decide upon his future educational plans. On the other hand, most secondary teachers and university professors in Germany feel that elementary education should not be prolonged beyond four years of basic training and are insistent upon a long period (the nine years in a *Gymnasium*) for drill in fundamental skills.

Just as there is not complete conformity in secondary schools in our forty-eight states, there are likewise differences in the ten *Länder* of the Federal Republic of Western Germany—Baden-Württemburg, Bayern, Bremen, Hamburg, Hessen, Niedersachsen, Nordrhein-Westfalen, Rheinland-Pfalz, Schleswig-Holstein, and West Berlin. Some secondary schools cover a period of seven years instead of nine. Then, too, there are differences in the types of *Gymnasium* in each *Land*—the Classical Language *Gymnasium*, the Modern Language *Gymnasium*, the Mathematics–Natural Science *Gymnasium*, and another (especially prominent in Bavaria) called the *Aufbauschule*, a seven-year institution. In some isolated instances there are schools which combine two or more of these kinds of *Gymnasia*. The most numerous of all these secondary schools, generally called *Realgymnasium*, is the one in which modern languages are emphasized.

Classes in a German *Gymnasium* are generally held daily except Sunday (most schools in Europe have classes on Saturday) from eight in the morning until one in the afternoon. A typical schedule of classes might have six forty-five-minute periods a day with a fifteen- or twenty-minute pause between the third and fourth periods, during which time the pupils congregate in the school yard. Since these outside areas are nearly always

[1] *Forms* in a German *Gymnasium* from the lowest to the highest are called the sixth form, the fifth, fourth, lower third, upper third, lower second, upper second, lower first, and upper first.

very small and since there is rarely any playground equipment or even benches on which to sit, the children stand around, pushing and jostling one another almost shoulder to shoulder, while munching a sandwich or an apple. One very new and beautiful *Gymnasium* for 1,200 students I saw in Bad Godesberg has possibly two acres of school grounds, but as yet they also have no playground equipment. In another new school in Düren for about four hundred boys there was less than a third of an acre for outside activities behind the school building. Naturally because Germany has a population of nearly fifty million crowded into an area 380 square miles, less than that of the state of Oregon, land is at a premium. And too, since so many schools were destroyed or partly damaged during the last war, there is an augmented need for new schools. It seems odd to me, however, that when new schools are built, planning does not include a sufficiently large site. Of course many of the schools in Germany use the local *Sportsplatz*, often far from the school, where there is enough room for athletic games. One very new consolidated school in Hessen, called *Schuldorf*, which opened May 1954 and was built for four million German marks through the combined talents and money of the *Land*, the districts, and Americans, is an exception. Here the school is set up to give formal education to about fifteen hundred children in kindergarten, elementary school, the *Volksschule*, the middle school, and an *Aufbauschule*. It is situated in a beautiful location near Darmstadt with a great deal of surrounding land, some of which is wooded. The buildings are each constructed and placed so that each age level may have its own play area. This type of school, however, is an experiment in consolidation, new to Germany, and has yet to be accepted.

German *Gymnasium* buildings are quite shocking to an American. Walking along the street, it is always very difficult for an observer to tell whether he is passing an office building, a factory, a barracks, or a school. There are generally no such pleasing exterior signs as those from which it is quite easy to recognize high schools in the United States. Usually built right on the street with little or no set-back and three to six stories high, a German *Gymnasium* is almost impossible for a western American to spot as an institution of learning. Time and again, as a Californian who likes to think of light, airy, spacious schools with an emphasis on bringing the outside into the school room, I was most depressed by the German *Gymnasium*. Typically these schools are drab, dark, and colorless. Interior walls are almost invariably painted cream or light beige. Rarely is there a picture, a map, a chart, hanging on the walls of any room. They are completely bare. Since visual aids such as maps are stored in a separate room, they are brought to the classroom only for the period needed and then returned to the store room. No effort is made to brighten the classroom with pictures and other materials of instruction possibly because the

teachers, rather than the pupils, move from room to room. A display of time lines, graphs, charts, murals, book jackets, mathematical designs, and other student-made projects, so common in the United States, is apparently unheard of in these German secondary schools. In general twelve to twenty desks with benches attached for two children are crowded into the classroom. To me, the dreariness and lack of color emphasize the seriousness and austerity of study in a German *Gymnasium*. The cell-like simplicity of classrooms is a virtual guarantee against distraction. I found little joy in learning.

Another way in which a German *Gymnasium* is very different from an American high school is in subject matter. Since, as has been said, the pupils are selected carefully and are therefore supposedly intellectually superior, their class schedules are loaded with traditional subject matter. The pupils may take twelve or more different subjects a week, but their daily schedules are not always the same each day as they are for high school students in the United tSates. For example, a *Gymnasium* pupil may take English five out of the six days at school; German, four days; gymnastics, music, and art, one day; Latin, three days; etc. Schedules are really somewhat comparable to our college and university schedules. The study plan for a lower third-form pupil (*i.e.*, one in the fourth year in the *Gymnasium*) could easily be the following:

Time	Monday	Tuesday	Wed.	Thursday	Friday	Saturday
8:00– 8:45	French	Geography	Latin	French	Church (mass)	Free
8:50– 9:35	Math	French	English	Math	English	German
9:45–10:30	English	Latin	Physics	Latin	Art	Latin
10:30–10:45	Pause	Pause	Pause	Pause	Pause	Pause
10:45–11:30	German	English	French	Geography	Art	Math
11:35–12:20	Religion[2]	German	Music	Religion[2]	French	English
12:25– 1:10	Physics	Free	History	German	Free	History
3:00– 5:00			Gymnastics (inside at school)		Gymnastics (outside—not regular)	

[2] Religion, which is either Catholic or Protestant (Protestantism is considered one kind of religion and not different sects) and the pupils are separated for this class, is a required subject taken twice a week during the years in the *Gymnasium*.

All students in these German secondary schools take the same subjects as a class (except Religion, as noted above). In other words, all pupils in—say—the first year of a *Gymnasium* (the sixth form) stay together in the same room for the school day with the teachers coming to them to teach Latin, mathematics, German, geography, etc. The children go to another room for their art, music, and gymnastic classes once a week and for such

classes as physics. The class schedules of American youth in junior or senior high school may be very different even though the children are in the same year in school. Children are also really promoted by subject matter in the United States. This is not the case in German secondary schools. If a child fails in a subject or two, he must repeat all his year's work although he may have been very successful in his other subjects. Another great difference between the curriculum of an American high school and a German *Gymnasium* is the length of time a subject is studied. *Once introduced, no matter at what grade level, the subject is studied until the final graduation examination.* For example, Latin is usually introduced in the sixth form and studied throughout the nine years. In the same way, English may be introduced in the fourth form to be studied for the next seven years.

Subjects studied emphasize the difference between the *Gymnasium* and the high school. The first question a German youth usually asks about an American high school is, "What languages are studied?" An American high school student may study a language, but he would rarely consider it of more importance than his course in dramatics, journalism, physical education, or electric shop. This emphasis on traditional subject matter such as languages is naturally in keeping with the original basis for establishing a German *Gymnasium* for the integration of knowledge gained through a long period of study.

Although some of these institutions are coeducational, usually they are organized as either boys' or girls' schools. However, if there is no local school of the type the parents desire for their girl (or for that matter, a boy), the school authorities must admit the girl to the boys' *Gymnasium*. In Düren I saw three girls attending school with 400 boys.

The life of *Gymnasium* children is far different from their American youthful counterparts in ways other than separation of the sexes. They are expected to do much homework. Even in the sixth form, a ten-year-old, after attending school six days a week from 8 to 1, is busy with homework in the afternoon and early evening. A German adolescent has a strict schedule of school and study until he enters the university where he has complete freedom. He may or may not attend lectures there as he pleases. Conditions of study and homework in American high schools and universities are almost the opposite. Marks and grades in German secondary schools are also of great importance, and generally the students are judged on a basis of 1, 2, 3, and 4 rather than A, B, C, D, or F. Competition and the securing of high marks is extremely important to a German youth in the *Gymnasium*. I discussed this competitional aspect of education with a professor of education in Hannover who had had a three months' study tour in the United States. He told me that his impression of American children was that life in general was made too easy for them and that there

was little force or drive back of them. He added that in Germany a child "must constantly fight for position in life." The child must, he continued, select his goal at the age of ten and stay with that aim forever.

Teachers in a German *Gymnasium* have had, as a rule, five to six years of university study followed by two years of pedagogical education in a *Studien-seminar.* Many of these teachers have a Ph.D. degree and of course are considered specialists in their two (or three) subject fields. Although there is some evidence of modern teaching methods (in Berlin, for example) by use of group work, audiovisual aids, etc., in general the teaching methods used in a German *Gymnasium* are lectures, question and answer recitations. All of the pupils are expected to do the same assignments, and although there is some discussion of individual differences I saw little evidence of attention given to individual needs. Perhaps this may be in part due to the fact that the teachers and administrators feel the children are already selected and only the "cream of the crop" remains. Teachers are given much respect—more so than in the United States. The children always rise when the teacher (or any adult) enters the room. Since the teacher has more authoritarian control in the classroom and there is so much scholastic work to be done, the teacher needs to give scant attention to such American classroom problems as discipline, roll taking, reading bulletins, conducting drives, etc. School is for the business of study only.

Again and again I was told by leading German educators that the primary purpose of public education, especially in the *Gymnasium,* was for the accumulation of knowledge and the learning of facts. This, then, is another point which must be underlined when showing that an American high school is not comparable to a German *Gymnasium.* Our professed aim is to make better citizens. This, of course, involves the learning of facts and the acquiring of knowledge but the frame of reference is different. A sixteen-year-old American attending a girls' *Gymnasium* summed it up when she wrote me, "I certainly have to give credit to these schools as far as 'education' is concerned; most of the girls study every day from 8 to 5 or later. The only draw-back is when it comes to activities and *fun.* There are no clubs, exciting football, baseball, or basketball games, fun nights, or weekly dances."

It can be seen then that a German *Gymnasium* is not comparable to an American high school (junior and senior and junior college) in the kinds of students admitted to each school, in the number of years and days of attendance, in playgrounds, in subject matter sequence, in number of subjects taken, in the instruction, in the preparation of teachers, in daily schedules, in separation of the sexes, in preparation and study (homework), and in many other ways. Criticism of American secondary schools frequently includes the remark that German secondary education is superior. I be-

lieve this is not true, especially when considering the one-sidedness of *Gymnasium* education and the selectivity of the students who must pay tuition. One must make a decision about the kind of secondary education desired. Is the aim narrow, directed solely at acquiring knowledge and learning facts? Should schools be established for only a select few? Is the aim free public education for every youth? Is there an attempt to make him a better citizen by developing all of his abilities and talents to the fullest? How can there be special education for the intellectually superior without increasing the tax load to support more teachers and more schools? Even could this be done, would it be desirable? With our increased educational research, understanding of adolescents, better teaching techniques, etc., I believe the American high school can challenge the intellectually superior without emulating the *Gymnasium*.

WHAT PRICE INTELLECT?

The immediate crisis is not to be minimized. There is no question that our prestige as a world power has been seriously challenged and our security threatened. This immediate emergency, however, must be met at levels quite outside the public school system.

Technological advances are now inevitable. In the long pull, our survival will be dependent on the value which our society puts on intellectual competence. Until we begin to put a higher price tag on the intellect we will continue to have serious problems in motivating our young people to high academic achievement and will gradually fall behind our competitors. Why should a young American make unusual effort to develop real scholarship when, if successful, he will be labeled an "egghead" and rewarded at a level which brands him as an economic failure in the eyes of his more practical fellow citizens. Dedicated teachers are handicapped when they try to inspire their students to high intellectual attainment. Too many young Americans are saying: "What does it get you? Look at the salaries teachers and college professors are paid."

America will get what it wants and what it is willing to pay for. The lesson of the present crisis is that intellectual superiority is imperative for survival. If, in our frustration and embarrassment, we learn this lesson, things may be different in the future.

—Arthur F. Corey, in an editorial in *CTA Journal*, January 1958

ADMINISTRATIVE OBJECTIONS TO A HIGH SCHOOL PROGRAM FOR THE MENTALLY RETARDED: A Reply

BY DONALD O. AMERO*

This analysis attempts to refute three commonly stated objections to the mentally retarded program now being undertaken in California high schools.

The argument usually begins that any extra moneys available should be spent on the gifted rather than the retarded. This line of reasoning comes up in almost every discussion concerning facilities for the mentally retarded, notwithstanding the fact that standards for the gifted improve whenever a retardate is taken out of a regular class. What is the rationale behind this reason? If one asks the question, "Why?" two other premises appear to be involved: (1) that the program for the retarded costs more than the other school programs, and (2) that it is the purpose of the secondary educational system to offer a highly competitive curriculum with emphasis upon success by the fittest. The objection that the gifted should be provided for instead of the retarded, since there is not enough money for all and many administrators frankly admit that it is not their practical purpose to provide equal opportunities for all youth regardless of their origin or status, therefore rests upon two other assumptions which will be considered below.

It is further argued that a high school program for the mentally retarded takes away from the general moneys available for the other educational programs. This assumption involves two fallacies: (1) a belief that

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the mentally retarded cannot profit from secondary school experience and will not contribute to society in a productive manner, and (2) a belief that the State moneys available for education are reduced and taxes are more because of the costs.

The first fallacy comes out of a confusion because of the general term "Mentally Retarded" which applies to the severely retarded as defined under Educational Code 9801.2, as well as to the retarded who are educable as defined under Educational Code 9801.1. Those in the former category do not come to the high schools as they are home or institutional cases requiring constant supervision. Those in the latter category have always come to the high schools, although to a lesser degree in the past,[1] and the legal definition in Educational Code 9801.1 stipulates that these youth may be able to become economically self-sufficient and socially competent as a result of a special high school curriculum. In other words, the fallacy in the foregoing argument is exposed because these youth are not placed in special classes in the first instance unless they can profit from secondary school experience. This is determined by individual psychological examination and past records as well as from the recommendations made by the school principal, psychologist, teacher, and school physician or nurse.[2] The fact that they can profit has also been empirically determined by various evaluative and follow-up studies.[3]

The second fallacy that available educational funds from the State are reduced and taxes are higher because of the expenses involved in maintaining these classes is less obvious because each school operates on a local budget which is not conducive to economy in State expenditures as a whole. It is the State which bears the extent of the excess costs and it is the State and its taxpayers which *actually make, not lose, money on this investment* because for every retardate that is helped to become socially competent and economically self-sufficient, there is a decrease in State expenditures for the courts, police, county jails, juvenile halls, adult and youth authority institutions, mental institutions, and in welfare, relief, and unemployment compensations. There are also hidden expenses for every maladjusted youth that the school is not able to rehabilitate or for whom the school is not able to act as a preventative agent, and these perpetuate themselves

[1] In the California Council for Retarded Children Annual Report, September 27, 1957, it is pointed out that the 43.2 per cent increase in enrollment of Point 1 (which refers to the program for the educable as defined under Section 9801.1) retarded at the high school level is due primarily to the fact that the Point 1 program became mandatory at the high school level as of July 1, 1956. But it is also estimated that only one-half of the eligible Point 1 children are actually in Point 1 classes.

[2] California Administrative Codes 182 and 183.

[3] Phelps, Harold R., "Postschool Adjustment of Mentally Retarded Children in Selected Ohio Cities." *Journal of Exceptional Children*, Vol. 23, November, 1956, p. 58.

when social and economic incompetence is passed on to the next generation, for Point 1 retardates do have children of their own.

Even when considered locally at the city and county level, it is reasonable to assume that the program more than pays for itself. Also, it is now highly questionable that special class facilities are any more expensive than those provided for the regular classes since, in addition to the regular school apportionment of $120 per child per year, there is a 75 per cent of excess costs reimbursement up to $200 per Point 1 child per year.

Objection II. *A high school diploma given to the Point 1 retardate jeopardizes the educational purposes of the secondary school system and renders the diploma meaningless.*

This objection is met on two grounds: (1) A high school diploma itself is not sufficient for admission to our four-year colleges and universities because students must also demonstrate proficiency in certain college prerequisites which the retarded pupil does not satisfy. In addition, a successful high school special class program prepares its retarded with work experience for a job which eliminates the necessity for more training in a junior college. (2) Employers now realize or can be easily helped to realize that the high schools no longer attempt to turn out finished products, and it is necessary to consider school recommendations along with the diploma when selecting personnel if the job requires certain skills and proficiencies.

Actually, a diploma is not necessary for a special class program on an all-or-none basis, providing it offers at least four years of training and culminates in work experience and/or job placement. Some students may even be encouraged to leave school before the end of four years if they can be successfully placed on a job. Since some of the mentally retarded who are at the higher end of the Point 1 continuum and who are socially poised and conscientious workers have been graduating in the regular classes and would graduate if placed in the regular classes now, it seems unfair to deprive them of a diploma because they have been placed in a special class. The best way out of this dilemma is not to make it an all-or-none affair, but to grant some special class students a diploma if they meet certain recommended standards of proficiency in both the special and the regular (non-academic) classes that they may attend. Other special class students failing to meet these standards would still benefit from a four-year program involving work experience.

The problem of the diploma has not yet been solved since these classes have not been in operation long enough to produce any seniors.[4] The

[4] Assembly Bill 417 amends Sections 9802 and 9802.1 of the Educational Code by requiring high school districts, as well as elementary and unified school districts, having an average daily attendance of 900 or more to provide for the education of such minors as of July 1, 1956.

thinking of administrators that seems to be evolving is to grant or not grant the diploma according to the merits of the individual case, instead of following an all-or-none policy. The nomenclature of subject matter will be consistent with the rest of the school, i.e., social studies, mathematics, world history, health and driver education, senior problems, etc.; students will have to meet certain standards of proficiency within these areas in order to graduate. *No special student who receives an F is held back or dropped out of school if he is working up to his ability level; but he does not receive a diploma unless he satisfies certain criteria in the above-mentioned subjects which meet with the approval of the principal, special class teacher-counselor, and the student's regular class teachers.* It is possible that some kind of a completion certificate may be offered to those students failing in these requirements. The ultimate goal of this program is to help the individual in adjusting to life after school by enabling him to become socially competent and to get a job. If this is accomplished, the mission is successful whether or not the diploma has been granted.

Objection III: *Secondary schools should place emphasis upon competition and success by the fittest.*

This appears to be the most logical objection of the three. Even if these special classes do not involve more costs, as indicated above, and even if no diploma were to be given, many would still object because of our traditional emphasis upon competition and success by the fittest as a primary educational goal. Society looks down upon "failures" with an almost "ruthless Darwinism." We all try to associate with our "superiors" rather than "inferiors" even in our personal and social lives, and we tend to ostracize those beneath us whether it be for economic, social, racial, national, religious, or intellectual reasons.

This objection can be met on both moral and scientifically pragmatic grounds. Morally, we can say that every person is worthy of brotherhood regardless of his origin or status. Social-psychologists have aptly labeled ours an ambivalent society which professes equality of opportunity and brotherhood, and then sanctions inequality of opportunity in economic and educational practices. Perhaps Kropotkin's version[5] of Darwinian survival is in order. Since "no man is an island" and every part contributes to the whole, it is well to consider the members who fail along with the ones who succeed in any given task. The deleterious effects of this failing majority may outweigh the merits of those who are competitively successful.

[5] Kropotkin: *Mutual Aid, A Factor of Evolution.* Alfred Knopf, New York, 1922.

SMOKING—"AN ADMINISTRATIVE HEADACHE"

BY NORMAN SCHACHTER*

"No Smoking" signs may be effective in theaters, churches, and street cars but they do not even begin to serve as an antidote for a secondary administrative headache. The State Education Code has a provision covering grounds for the suspension and expulsion of pupils for smoking. Unfortunately, no provision is made to take care of the many hundreds of pupils who continue to infringe upon and violate this regulation. Prohibiting anything seldom serves as desired or expected in deterring the action against which it is directed—and even less in the question of smoking on school grounds.

Section 16073 of the Education Code specifically states "smoking or having tobacco on school premises constitutes a good cause for the suspension or expulsion of a pupil." This may seem to be a wonderful sword to hold over a student's head. However, many pupils of today care little for this rule and openly break it. The administration is confronted with two alternatives. One is to enforce the rule rigidly and the other is to ignore it. To ignore any rule is to "court" trouble in other fields. Though it is said "rules are made to be broken," it is wise to have a clear-cut and comprehensible viewpoint shared by all students. A realistic and legitimate policy has to be made. Idle drifting to avoid the "no smoking" problem is merely the wishful thinking of a wishy-washy administration. The tone of the entire school can be determined by the action taken on certain principles. The smoking issue is one that can be used as a leveler to consolidate a spirit of consideration and mutual trust. It is not a bone of contention that can be ignored or overlooked. It should not be a problem handled in

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such a manner as to convey the impression that the smokers are "unclean" and undesirable.

Statistics bear out the relationship between non-attenders of schools and smokers. There is a positive correlation between those that smoke on or around school grounds with those who are constant truants and occasional absentees. As more and more young people are taking "to the weed," some policy has to be decided upon and followed through. Naturally, each case is an individualized question and should be treated as such, but a blanket rule, with flexibility, should be employed.

Policing and snooping are not the answers for a healthy administration. The smokers are usually the intractable and perplexing "problems" of the school. Many teachers quite often would like to see these students expelled. Expelled to where? The "where" or "why" enters into the mind of a conscientious administrator.

Some teachers are in favor of a "bull-pen" or "bull-pit" where students can smoke openly. The legality of such an area is highly questionable. Besides, the moral aspect and parental objection would undoubtedly create additional considerations. And—there is no assurance that students would stop at the "bull-pit" to take a "drag." What is to stop them from going right on out and off the school grounds? Furthermore, few people, especially youngsters, who are extremely sensitive, like to be set off so that others literally point a finger at them. Feeling that they are objects of ridicule, they would resent the action of the administration.

The problem, in a nutshell, is not to decrease the sale of tobacco to students, but to educate the youngsters not to smoke on the school grounds. The habit of smoking is not the right thing for school-age youth. But it is becoming increasingly more difficult to convince students of the adverse effects of tobacco when billboards scream at them to "live modern" and motion picture stars and athletic idols "plug" the sale of cigarettes. An additional controversy arises if students leave the grounds. Here truancy is involved and eventually a falling behind in studies.

The common practice of advising young people to leave tobacco alone until they finish school is sound advice, but something more than lip-service should be given to the students. I've lost count of the inexhaustible number of students who have repeatedly promised that they will give up the habit of smoking as "it is an easy habit to give up for I've given it up dozens of times."

Little data are available to help formulate a program but there are enough to guide an administration in meeting the issue. An educational plan with the help of teachers, coaches, and administrators can combat the discipline problem which arises when pupils smoke on and around the school grounds.

Three factors have to be considered in setting up a sound plan by the administration. They are as follows:

1. What are the effects of tobacco?
2. Why do young people smoke?
3. What should we do about the problem?

With the above questions in mind the administration has a base from which to operate. The program is sold to the students through clever techniques, underselling, cooperation by the entire school staff, and an intelligent approach to an irksome dilemma. Do not work on the assumption that you are fighting a losing cause. Give the students credit, and if no credit is apparent look for something for them to have a feeling of success and cooperation in working with the school.

The effects of tobacco should be mentioned not just by signs but by open discussions in English and science classes and by the physical education teachers. There is enough information available to conduct entrancing and acceptable lessons to show the negative aspects of smoking at a young age. No attempt should be made to use the "scare" technique but to give an honest picture of the facts. Students don't worry too much about the possibility of some future ailment, but they are captivated to discover immediate results. Students, surprisingly enough, are impressed in finding out that in some individuals smoking irritates the breathing passages and predisposes to infection of the respiratory organs. It should be noted, in a practical form of suggestion, that it also causes a more rapid heart beat, a rise in the blood pressure, and stimulates the adrenal glands to take sugar from the liver and muscles and deposit it in the blood. This is thought to account for the pepped-up feeling following a smoke. It is wise to be honest in telling of the effects of tobacco. Students want to know that it is habit-forming. They also appreciate truthfulness which in turn inspires confidence in the administration. A comparison should be made with alcohol to show that though it is habit-forming, it does not create "dog-like" addiction.

Students would appreciate learning that smoking lessens coordination and skill operations of hand and eye. Though the pupils who wander off and smoke may not care for athletics, they realize that coordination of eye and hand are valuable assets in anything they do, such as motorcycle driving, hot-rod driving, or any mechanical device. As all young people love to eat, it should be noted that the constant use of tobacco irritates the digestive tract and results in loss of appetite and weight reduction. Stress should be made of the fact that moderate smokers do not live as long as non-smokers, and heavy smokers live shorter lives than moderate smokers. The latest research reports from eminent doctors on the correlation of

smoking and lung cancer helps substantiate many statements that have been made.

It must be kept in mind, however, that a knowledge of the effects of tobacco will not stop any appreciable number of smokers. The percentage of students who will sneak off is never lessened by moralizing, preaching, or threatening. These pupils have to be reached through the knowledge of "why" they smoke and then "what" to do about it.

A realization of the "why" of smoking for youngsters is of utmost importance. If they can be made to see the reasons, they may be helped. The goal is not to cure the student of smoking, but primarily to obtain his help in not smoking on the school grounds. The administration must acquaint the students with the fact that young people do smoke, do enjoy life, and can contribute something to society. It is ridiculous to pretend that the practice of smoking is a "curse." Students should see that they start smoking, at least many of them do, because they see so many adults doing it. They, therefore, think it is a manly or womanly custom. As an administrator, never be deceived in believing that boys are the only ones to "sneak off." Girls are as careless in their conformities as boys and most often prove to be more of a school problem.

The "what" to do about the problem is, of course, the salient aspect of the administrative discomfort in smoking. A blanket rule of "expulsion or suspension" is ridiculous, as is any blanket rule about anything. It becomes a game of "cat and mouse" with the student playing the role of Mr. Rat who tries to nibble the cheese without getting caught.

Parental cooperation should be encouraged, inspired, and stimulated but never as a threat for the student. The students should be made to reailze that smoking is not manly or womanly. A clever campaign may incorporate the principle that anyone can smoke but that it takes self-control, determination, and some strength of character not to smoke.

It is expedient to drive home the fact that the money spent for cigarettes might be saved for a more profitable purpose. Don't attempt to give students too many useful purposes or they will shy away from any suggestions in that direction. Above all, be honest in presenting and teaching the facts. It pays to have the administrative staff and faculty set good examples by being aboveboard in the smoking problem.

Perhaps the most comprehensive overture an administration can make is to have students know that smoking by school athletes will not be condoned or tolerated. Have set rules and abide by them. The appeal is made to greater athletic prowess by citing the fact that no coach allows athletes to smoke. Do not exaggerate the unsound effects or make smoking a moral issue. It is not a moral issue and it is from that viewpoint that trouble eventually comes. Remember—never use the scare or fear motive in stressing tobacco on the school grounds.

It is a good idea to have a policy on "How should teaching about tobacco or smoking *not* be approached!" It should never be singled out as a topic by itself, unrelated to other health topics, but integrated naturally according to interest and need. The objectionable effects of tobacco should never be magnified. Such teaching defeats its purpose and is unnecessary, as the facts are black enough. If students know the true evidence about smoking, they are more likely to deal intelligently with the subject. When the cloak of mystery is removed, they will lose unwholesome mis-knowledge and will assume the wholesome viewpoint with a degree of caution.

The legal responsibility of the schools in handling the smoking problem is given in the Education Code. It is also unquestioned that this responsibility rests in teaching the pupils facts about tobacco, and training them to shun it, especially on the school grounds. That there are potent counteracting influences in the home, on the street, in the movies, and in the printed word makes this instruction more difficult. It does not excuse neglect or a perfunctory assumption of this responsibility on the part of the administration and teachers.

NEW METHODS OF TEACHING TRIED

Traditional concepts of teaching may be going the way of the little red schoolhouse, the hickory stick, and the dunce cap.

In an effort to make more effective use of the most able teachers—of whom there is always a limited supply—many school systems throughout the country are experimenting with new approaches and new methods of teaching. Some of these methods involve the use of "teacher teams," assistant teachers, and technological techniques like television and tape recordings.

With the aid of a $350,000 grant from the Ford Foundation, the National Association for Secondary-School Principals is planning to expand six projects that were started last year and to support twenty new experimental ventures.

One project already under way in Newton, Massachusetts, which has attracted considerable attention in educational circles, involves new ways of grouping subject matter, teachers, and students, and new methods of teaching.

A feature of the experiment is the use of teacher teams—employing, when feasible, teams of teachers and nonteaching assistants to handle large groups of youngsters. For example, some subjects, which largely involve exposition and do not require teachers to give individual attention to pupils, are taught in groups of 90 to 225 youngsters. Other subjects, which require recitation and teacher-class criticism, are being taught in classes of eight to twelve pupils.

Another experiment, in Jefferson County, Colorado, involves the study of class size. This project is testing such hypotheses as "A class of seventy students taught by a team of two teachers shows better results than two classes of thirty-five students each taught by individual teachers."

In studies such as these, the assumption is that the two teachers handling the large group will complement each other and thus offer their students a wider range of educational opportunities.

—*New York Times*, August 17, 1958

CURRENT EVENTS AND MATERIALS IN BUSINESS EDUCATION

BY EDWIN A. SWANSON*

Business education today needs more and better qualified teachers. In spite of increases during the last two years in the number of candidates enrolled in business teacher education programs in California State colleges and universities, there still is a distinct shortage of qualified and desirable candidates. The critical shortage of girls who are really well qualified to teach shorthand is especially difficult to understand. Business teachers and administrators in California junior colleges can render an important professional service if they will identify and encourage outstanding graduates who show interest and aptitude for teaching to go on to a California college or university to prepare for business teaching.

The status of general business as a subject offered in California high schools represents a significant trend in business education in California. Enrollments have increased sharply (7) both in numbers and in proportion to other subjects. The most important change, perhaps, has to do with the nature of the subject matter: a shift toward more basic business and economic content. New textbooks (4, 13), textbooks in prospect, and other related published professional literature show this trend clearly. More and more the content is moving toward basic business and economic principles that everyone should know; and there is evidence of an emerging acceptance of the kind of planning and thinking that fits in with usually stated and accepted principles of general education.

The current "revision program" of the Cooperative Study of Secondary-School Standards will include a revision of the business education section.

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The *Evaluative Criteria* forms have been used throughout the country since 1936 as the basis by which secondary schools are evaluated; the last revision date was 1950. Responsibility for recommending changes in the Section D-4 of *Evaluative Criteria–Business Education* has been placed with the United Business Education Association. Dr. Theodore Yerian of Oregon State College has been asked to serve as chairman of the revision committee.

Business teachers of California have elected as officers of the California Business Education Association: Louis Gentile, Chaffey Junior College, president; Dr. Fred Cook, Stanford University, vice-president; Miss Hope Powell, Los Angeles Junior College, secretary; Miss Lura Lynn Straub, San Diego State College, treasurer. Howbert Bonnett, Sacramento Junior College, will serve as historian; and Jack Snyder, Santa Cruz High School, is the past president. Area or section-level presidents include: Harry Baggett, Harry Ells High School, Richmond, Bay Area; Harold Hendry, Bakersfield High School, Central Area; Miss Nihla Knight, Monterey High School, Central Coast Area; Dr. Helena Hilleary, Los Angeles City Schools, Los Angeles Area; Miss Virginia Sprague, Davis Union High School, Northern Area; Miss Mary Sullivan, San Diego High School, San Diego Area; Jack Bosna, Lakewood High School, Southern Area; and for the California Association for Distributive Education group, Dr. John H. Linn, San Francisco State College.

Asilomar was the location for the spring meeting of the California Business Education Association, which, this year, was held as a joint convention with the Western Business Education Association. Business teachers of California were by this joint convention brought together with business teachers of the other seven western states, Alaska, and Hawaii, to participate in a three-day program of addresses, conferences, and panel discussions. Featured speakers included Dr. Harold Spears, superintendent of schools, San Francisco, and Dr. Herman G. Enterline, professor of business education, Indiana University. Also featured for an unusually effective part of the program was a five-man "Brainstorming Team" from Batten, Barton, Durstine & Osborn, Inc., who demonstrated that group brainstorming can be used to speed up the flow of ideas applicable to specific problems. From this part of the program, the convention program got its theme: "Brainstorming for Better Business Education." The 1959 state-level spring meeting will be held in Long Beach during the early part of the week preceding Easter. The *CBEA Newsbulletin* is being reestablished, with plans for four issues during this school year. Mrs. Patricia A. Rothermel, Oceanside College, will serve as editor; Dr. Fred Cook, Stanford University, will serve as coordinator and consultant.

New officers of the Western Business Education Association (eight western states, Alaska, and Hawaii), as of August 1, include: Dr. Clisby T. Edlefsen, Boise Junior College, president; Dr. Ralph C. Asmus, Phoenix College, vice-president; Miss Helen Smith, Lewis and Clark College, Portland, secretary; Miss Ann Corcoran, Washington State College, Pullman, treasurer. Miss Mary Alice Wittenberg, Los Angeles City Schools, is the past president. The 1959 Convention will be held in Phoenix during the latter part of the week preceding Easter.

Business teachers have as their new national-level president Dr. Vernon A. Musselman, professor of education and head of the Department of Business Education, University of Kentucky, who took office on August 1 as president of the United Business Education Association. Other officers include: as vice-president, Dr. Milton C. Olson, director of business education, New York State College for Teachers, Albany; as treasurer, Miss Dorothy H. Hazel, assistant professor of business education, University of Nebraska; and, continuing as headquarters officers and executive secretary, Hollis P. Guy. Again selected to serve as a member of the United Business Education Association Editorial Board is Dr. Edwin A. Swanson, professor of business and head of the Department of Business Education, San Jose State College. Current publications include the *UBEA Business Education Forum, National Business Education Quarterly, Bulletins of the National Association for Business Teacher Education,* and other non-serial publications such as *The Business Education Program in the Expanding Secondary School.* (2).

The Bureau of Business Education of the California State Department of Education, Sacramento, will soon announce the appointment of a new staff member with the title of "Researcher and Teacher Trainer." He will be expected to plan, coordinate, and conduct studies and investigations in the field of business education; he is to develop appropriate guides and publications for use as instructional materials; and he is to assist in the development of business teacher education programs in the California colleges and universities, to conduct workshops and institutes for business teachers, and to do demonstration teaching in selected business education classroom situations. A few months ago Miss M. Claire O'Brien, formerly business teacher and for seven years principal at Davis High School, was appointed to the position of consultant in business education. Miss O'Brien succeeds Dr. M. Bernadine Bell.

Other report items to be associated with the Bureau of Business Education include a series of conferences designed to improve the teaching of bookkeeping in California high schools. These conferences, being held in two sets, one in Southern California and one in Northern California, got

under way this last year with meetings in February and April in Los Angeles and in Berkeley. They will be continued during this school year, with an assumed end result: a new state publication on the teaching of bookkeeping, corresponding to and perhaps similar to the ones on typing, *A Guide for the Teaching of Typewriting* (10), and shorthand, *A Guide for the Teaching of Shorthand and Transcription* (9). The Professional Advisory Committee for the Bureau of Business Education met in San Francisco, April 18 and 19. The Committee reviewed policies, evaluated the projected programs, and discussed and evaluated practices of the Bureau. Areas discussed included research, business teacher education, proposed changes in the credential program, business education trends in the state colleges, business education trends in the junior colleges, business education trends in the high schools, trends and programs in distributive education, problems in making typewriting available to all who should and want to take it at the high school level, current enrollments in business education in public secondary schools in California (7), the general business conferences, the bookkeeping conferences, the anticipated report of the Lomax state-wide study of business education in California, other publications in progress and anticipated, and staff assignments with particular reference to the new position recently announced as "researcher and teacher trainer."

Of particular interest to business teachers in California and to all others interested in business and economic education at the secondary school level is the recent appointment of Dr. Vernon A. Ouellette as the field director for the Northern California Council on Economic Education. Headquarters for his work will be at San Francisco State College, where he will have status as a faculty member and serve in a part-time related professorial assignment. Dr. James D. Calderwood, professor of economics, Claremont Graduate School, continues as the West Coast representative for the Joint Council on Economic Education.

In this same area of interest, it is appropriate to report briefly on the Palo Alto Conference on Economic Education held at Rickey's Studio Inn, May 15–17. It was attended by forty-four college and university faculty members who are actively involved in teaching courses in economics and business. Thirty-five of those present were members of delegations sent by the eleven state colleges in California: San Francisco State, Los Angeles State, Long Beach State, San Diego State, Sacramento State, Fresno State, San Jose State, Chico State, Humboldt State, San Fernando Valley State, and California State Polytechnic College. Others participating represented Occidental College, University of Southern California, Pomona College, and Claremont Graduate School; and there were three official representatives of the Joint Council Staff. The college professors attending this conference, of course, talked about how to improve college and university courses in economics; but of particular interest and importance is the

reasonable conclusion that the focal point of nearly all of the conference addresses and discussions was that of improving instruction at the secondary school level. For example, Los Angeles State College faculty members reported on their proposed course in economics for secondary teachers in service; Long Beach State College faculty members reported on an Economic Education Project (for students preparing to teach in the secondary schools); the San Diego State College report concerned a new course in Economic Problems and Economic Education; Dr. Laurence deRycke of Occidental described a new methods course; and Dr. Proctor Thompson of Claremont reported on how secondary teachers were being served in a special graduate-level seminar.

Recent developments in economic education with an inherent and basic relationship to business education cannot be ignored. Business teachers are not wanting to be caught ignoring or shifting this responsibility; and important evidence that business teachers are thinking along these lines is to be observed in the new fifteenth volume of the American Business Education Yearbook, entitled *Educating Youth for Economic Competence.* (6). It was edited with particular reference to how programs of business education can aid in the achievement of the objectives of economic education. This yearbook was published jointly by the Eastern Business Teachers Association and the National Business Teachers Association. It clearly has the participation and blessing of key leaders in the United Business Education Association; and it includes a special introduction by Galen Jones, Director of the Council for Advancement of Secondary Education Study of Economic Education.

Latest release from the Council for Advancement of Secondary Education Study on Economic Education is *American Capitalism: An Introduction for Young Citizens.* (1). It was preceded by *Key Understandings in Economics: Derivation, Validation, and Evaluation of a Composite List of Basic Economic Topics.* (11).

Delta Pi Epsilon, honorary and professional graduate fraternity in business education, has a new executive secretary, Dr. Ruth Anderson, North Texas State College, Denton, who succeeds Dr. Charles Hicks, Ohio State University. National president is Dr. Dorothy Veon, Pennsylvania State University.

Latest winner of the Delta Pi Epsilon Research Award is Dr. T. James Crawford, Indiana University, with his study, "The Effect of Emphasizing Production Typewriting Contrasted with Speed Typewriting in Developing Production Typewriting Ability," completed in partial fulfillment of the requirements for the doctorate at the University of Pittsburgh. Dr. Crawford is the only two-time winner of the DPE Research Award. Honorable mention award winners included Dr. Richard S. Perry of the Uni-

versity of California at Los Angeles whose study was reported under the title of "A Critical Study of Current Issues in Business Education in the Public Junior Colleges of California." (12).

Supervisors and teachers alike will find *The Business Teacher Learns from Cases* (3) helpful. It's full of ideas and suggestions, if the reader or reviewer is open to them. A Delta Pi Epsilon special project committee developed the publication.

Dr. Forrest L. Mayer of San Jose State College is the new California State director for Future Business Leaders of America, secondary-level business student organization sponsored by the United Business Education Association. California has more than a hundred active chapters. Nationally, charter number 1,700 was issued during the preceding school year; and the program now involves more than 44,000 active student members. A California state-level convention was held in Fresno in April with between four and five hundred FBLA students in attendance. Next year, the convention will be in Sacramento with Sacramento High School and other nearby chapters serving as hosts.

The American Business Writing Association will hold a regional-level conference in San Francisco, Saturday, October 4. Place of the meeting will be San Francisco State College. The program committee is headed by Mrs. Bernice Biggs, associate professor, San Francisco State College; the western regional vice-president is Dr. Erwin M. Keithley, associate professor of business education, University of California at Los Angeles.

BIBLIOGRAPHY

(1) *American Capitalism: An Introduction for Young Citizens.* Case Economic Literacy Series, No. 1. Council for Advancement of Secondary Education Study on Economic Education. Washington, D.C.: Council for Advancement of Secondary Education, 1958. xi + 116 pp.

(2) *The Business Education Program in the Expanding Secondary School.* Prepared for the National Association of Secondary-School Principals under the editorial supervision of the United Business Education Association; Lloyd V. Douglas, chairman, editorial committee. Washington, D.C.: United Business Education Association, 1957. 160 pp. Also published as *The Bulletin of the National Association of Secondary-School Principals,* Volume 41, Number 225, January 1957.

(3) *The Business Teacher Learns from Cases.* A publication developed by Delta Pi Epsilon, honorary graduate fraternity in business education. Cincinnati: South-Western Publishing Company, 1957. xiv + 175 pp.

(4) Crabbe, Ernest H., Enterline, Herman G., and DeBrum, S. Joseph. *General Business.* Seventh edition. Cincinnati: South-Western Publishing Company, 1956. x + 598 pp.

(5) Douglas, Lloyd V., Blanford, James T., and Anderson, Ruth I. *Teaching Business Subjects.* New York: Prentice-Hall, Inc., 1958. x + 538 pp.

(6) "Educating Youth for Economic Competence," *American Business Education Yearbook,* Volume 15, 1958. Published jointly by the Eastern Business Teachers Association and the National Business Teachers Association. Available from New York University Bookstore, 18 Washington Place, New York 3, New York. 1958. xv + 377 pp. $3.75.

(7) "Enrollments in Business Education in Public Secondary Schools of California in 1956, with Comparisons for 1954, 1951 and 1948." Mimeographed Release, Bureau of Business Education, California State Department of Education, Sacramento. April 1958. 24 pp.

(8) "General Business in the Education of Young Adolescents," *Bulletin,* California State Department of Education, Vol. XXIV, No. 7, August 1955. viii + 85 pp.

(9) "A Guide for the Teaching of Shorthand and Transcription," Publication No. 73 of the Bureau of Business Education, California State Department of Education. January 1955. Mimeographed. vi + 78 pp.

(10) "A Guide for the Teaching of Typewriting," *Bulletin,* California State Department of Education, Vol. XXI, No. 11, September 1952. viii + 54 pp.

(11) *Key Understandings in Economics.* Council for Advancement of Secondary Education Study on Economic Education. Washington, D.C.: Council for Advancement of Secondary Education, 1956. + 76 pp.

(12) Perry, Richard S. "A Critical Study of Current Issues in Business Education in the Public Junior Colleges of California," *National Business Education Quarterly,* 26:16–22, 27, March, 1958.

(13) Price, Ray G., and Musselman, Vernon A. *General Business for Everyday Living.* New York: Gregg Publishing Division, McGraw-Hill Book Company, Inc., 1954. xiii + 498 pp.

(14) *Requisites for Economic Literacy.* Council for Advancement of Secondary Education Study on Economic Education. Washington, D.C.: Council for Advancement of Secondary Education, 1956. 29 pp. Also published in *The Bulletin of the National Association of Secondary School Principals,* February 1956.

WANTED: RESPECT FOR INTELLECT

I believe, in the first place, that we must recover the element of quality in our traditional pursuit of equality. We must not, in opening our schools to everyone, confuse the idea that all should have equal chance with the notion that all have equal endowments.

Nor is it healthy to discern a hint of privilege and pretension in those whose intellectual abilities are outstanding. Ideals of excellence are not unknown to us. Those who excel in sports, in the arts, in adventure, are accorded that rare pleasure of the human mind—the pleasure of admiration. We must now, I believe, extend this ideal of excellence and teach our young people, indeed sometimes ourselves, to respect, to relish what is in fact the rarest of all our national resources—mental capacity and intellectual grasp.

—Adlai E. Stevenson, in "Dual Education Problem: School and Home," *New York Times Magazine*

WHAT'S HAPPENING IN CALIFORNIA SECONDARY SCHOOLS

BY WILLIAM N. McGOWAN*

What's Happening in Junior High Schools

Stevenson Junior High School, Los Angeles, holds an art and music festival each spring, during which students display crafts, ceramics, water-color paintings, sketches, and a variety of work in color and design. Orchestras and glee clubs present concerts for pupils and parents. Students of elective subjects in other departments also exhibit various projects. Visiting experts in the field of art judge the exhibits and make awards. Teachers of English organize tours of the exhibits with their classes, after which there are class discussions to assist pupils in selecting electives for the next semester.

Griffith Junior High School, also in Los Angeles, has organized a chapter of Future Teachers of America and has received an FTA charter. Steps taken in organizing the chapter:

1. A sponsor with genuine interest in boys and girls and dedication to public education was selected.
2. Faculty members were alerted.
3. Homeroom teachers submitted students' names on the basis of interest in a teaching future.
4. A much publicized orientation meeting was held.
5. A name for the chapter was chosen—Lenore L. Marsh Chapter, in honor of a Griffith Junior High teacher.
6. The permanent roster was signed and the constitution ratified.

* Executive Secretary, California Association of Secondary School Administrators.

7. Officers were elected.
8. The faculty submitted a list of activities suitable for members to perform for the school.
9. The school's FTA charter was presented to the school in a special assembly.

At the *Lathrop Junior High School in Santa Ana,* since 1950 a special public day class on the secondary school level has been established for the cerebral palsied and orthopedically handicapped children. This special education class is the only one on the secondary school level in Orange County. The students, of whom there are twelve in number, are transported on school buses, properly supervised by a bus matron, from all parts of the county.

Since the basic needs of cerebral palsied children are the same as those of other children, their educational opportunities should also be similar. However, the handicapping conditions of some of the cerebral palsied children make it impossible for them to take full advantage of their educational opportunities until they have been helped (by using special tools and equipment) to compensate for their handicaps. Thus at Lathrop Junior High School, the child is helped to adjust to these learning situations. At nine o'clock in the morning a regular academic program is carried on. After the opening flag salute exercises and announcements, reading and English are carried on. This is followed by classes in science and music. After thirty minutes of recreation (shuffleboard, basketball, baseball, four-square) social studies class is held until lunch period. In the afternoon session, classes in mathematics, spelling, arts and crafts are held.

The above classes are so arranged as to permit a quiet activity such as reading or music, followed by a more strenuous activity such as woodcraft, metalcraft, weaving, radio repairing, and clay modeling. Field trips to local industries which employ physically handicapped people are taken throughout the school term. Typing is carried on through the child's reading and English lessons.

West Junior High School, Downey, has a home-visit plan that has been in operation for two years. Evaluation of the program indicates certain problems. Home calls have been reduced from twenty a year to ten per year. Teachers listed the following advantages and disadvantages of the program:

Advantages

1. Opportunity for viewing home surroundings
2. Excellent method of getting acquainted with parents

3. Better understanding of child's behavior
4. Good public relations
5. Opportunity of improving parent and student attitudes
6. Opportunity of seeing child in home situation
7. Creation of good relationship between parents and teachers, and between parents and the school
8. Opportunity for parents to get a truer perspective of the student's work and behavior through grade book examination and discussion
9. Genuine feeling of warmth between teachers and visited students
10. Improvement in work following visits by even scholarship students
11. Personal attention gratifying to parents

Disadvantages

1. Teacher invitation to home less desirable than invitation originating from the home or the student
2. Visits time consuming
3. Problem of both parents working: visits difficult to arrange
4. Some home conditions embarrassing to both parents and teachers
5. Some lack of parent appreciation of visits even when visits are made by appointment

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What's Happening in Four-Year and Senior High Schools

In 1957 the many agencies dealing with juveniles in *Oakland* found themselves handicapped in their task of preventing or controlling delinquency. This handicap was caused, primarily, by these factors: lack of rapid communication between the agencies concerned, misunderstanding of the duties and limits of responsibilities of each agency, and the lack of any means of coordinating known information.

The entire problem came to a head when racial tensions at one of the schools precipitated an eruption of several serious fights. At that time the City Manager called a meeting of the heads of the following youth agencies to initiate plans to meet the problem: the public schools, the police department, the recreation department, the county probation department, and the California Youth Authority. Representatives of each of these agencies then met to discuss specific problems and exchange information.

Two inter-agency groups are now a reality in Oakland. These groups function separately and in different sections of the city. It is believed that

the success of the group action is definitely related to understanding and working with specific youngsters. Such youngsters are known or may become known by the individual representatives of the member agencies.

Meetings are held every two weeks with the chairmanship rotating among the agencies. The purpose of the meetings is to have each agency report on incidents or rumors which might affect one or more of the other agencies. This is a different and more direct approach. Its immediacy is in direct contrast to the spending of long hours discussing the basic causes of delinquency and attempting to change long-standing social forces. As the meeting progresses, each member reports on occurrences which have implications for the other members. The schools report on suspensions, fights, tensions, new student friendships, and group formations. The recreation department members tell of youngsters who have been excluded from the recreation centers and playgrounds. They may request information concerning individual members of a club which has asked for a meeting place and sponsor. The police department goes over its juvenile reports and recent police incidents. Progress reports are given on probationers and parolees by the county and state juvenile authorities. As these reports and incidents are discussed other members, having knowledge of an individual or other circumstances, contribute to the overall knowledge of the specific problem being considered.

Individuals and groups are discussed with the result that each agency can take appropriate action in the zone of its responsibility. Individualized programs are effected for returnees from Youth Authority or the county boys' camp. Preventive measures are initiated by several agencies working with one or more teen-agers.

The excellent coordination and "face to face" contact has resulted in a much closer personal relationship, not only among the agencies, but also among the individual members of the agencies. These members have worked together in the past without really knowing or fully trusting each other.

The merits of this procedure are difficult to assess. Many incidents which may have been prevented cannot be counted. This much is known: there is a coordinated approach to the problems of individuals and known groups in the community. The agencies are very conscious of this coordination but, more important, the effect on Oakland's youth is evident. They have become aware of this unified approach. School personnel, recreation directors, police officers, probation and parole officers are able to talk to such youngsters about the same problems. It's no longer possible for the youngsters to play one agency member against the other. This awareness on their part has had a salutary effect of inhibiting and deterring antisocial and delinquent activities.

Participating members of the inter-agency group continually perceive

increased understanding of the functions and limitations of the other members. There has been a remarkable increase in the ability of the members to work together and to understand each other's problems. Results have enabled individual and agency alike to see the worth of the time and energy they have devoted.

Beverly Hills High School makes good use of "A Pre-College Reading List of Distinguished Books in Literature . . ." This pre-college reading list was compiled primarily with two groups of students in mind: (1) the more capable learners, and (2) the average learners who are particularly interested in literature. Some of the books are classics; some are great books; all are written by authors who are gifted with creative talent and who are skilled literary craftsmen. It is suggested to students that by the time they are ready for college, they should have read many of the listed books. There is a serious effort made to broaden and up-grade student reading interests.

NEW CERTIFICATION PLAN

The University of Wisconsin's School of Education has proposed a plan for certifying teachers on the basis of demonstrated knowledge and skill. Designed to replace the present, rigid pattern of specific courses in educational psychology, methods of teaching, class management, child behavior, etc., the teacher still would be able to qualify by means of the old pattern, but would, in addition, have the option of taking examinations proving mastery of required material in three areas: (1) liberal education, (2) the subject she plans to teach, and (3) the learning process. On passing the exams she would be eligible to take a position as a probationary teacher.

"To put it simply," Dean Lindley J. Stiles explained, "we plan to recommend students for teacher certification on the basis of what they know and can do—to measure their general knowledge and scholarship and their teaching ability—rather than to require specific information that may be contained in any particular course."

—*School Board Journal*, August 1958

SYMPOSIUM

New Directions for High School Education

This first symposium consists of several provocative analyses of the current educational scene that have been made by prominent American educators. They are intended to provide a framework for the discussion of the total educational program of the American high school, which the series of symposiums this year is designed to promote.

NEW DIRECTIONS FOR THE HIGH SCHOOL CURRICULUM

BY LLOYD S. MICHAEL*

In recent months education has become a matter of prime urgency to the nation. The American high school appears to be the focus of this concern as communities throughout the nation are examining all aspects of secondary education in an attempt to chart a future course by finding new ways to meet new needs. There is a growing recognition that we must have only first-rate high schools if they are to meet the demands made upon them and provide an appropriate and challenging education for all youth.

An appraisal of the modern high school gives some clues to the probable direction and destiny of secondary education. The current school has many significant accomplishments. The goals of secondary education have been broadened from a narrow concept of serving merely an intellectual and social elite to the responsibility of guaranteeing to all normal youth the opportunity to achieve their personal and social aims through education. There has been a steady and marked increase in the per cent of youth receiving the benefits of an improved program for youth education. In most communities the goal of universal secondary education has been accomplished; approximately nine out of ten young people between the ages of fourteen and seventeen are now in school. In the past sixty years more than four years have been added to the average school experience of the

* Superintendent, Evanston Township High School, Evanston, Illinois. Based upon his remarks to the Conference on New Directions for the American High School, Stanford University, July 8, 9, 1958.

typical American youth. No other nation has aspired to such educational achievement.

Yet this unique emphasis upon the education of all youth has revealed certain weaknesses and shortcomings. Low standards, lack of competition and incentives, inadequate and inappropriate offerings for different levels of ability, "snap" courses, and poor instruction have all too frequently been the price paid in many schools for the attainment of nearly universal secondary education. The quality of the educational experiences has generally lagged far behind the quantity of students enrolled in our secondary schools. A serious weakness of the high school in many communities is an outmoded, entrenched curriculum which fails to serve effectively the needs of students and the requirements of a space age. Such limitations of the secondary school as it operates in many communities emphasizes weaknesses that must be overcome if the high school is to function effectively.

Potent forces and influences now current on our political, economic, and social scene are also major determinants in the destiny of secondary education. "The convergence of powerful forces—an explosion of knowledge and population, a burst of technological and economic advance, and the uprooting of old political and cultural patterns on a world-wide scale" reveals the magnitude and complexity of the problems that will commit the high school to new and more difficult tasks. It is imperative that these forces and trends which will influence the character and direction of secondary education challenge our maximum efforts to meet our nation's pressing educational needs.

What are the requisites of a challenging and demanding program of youth education? What priorities should be established to insure the accomplishment of the desired goals? What changes should be proposed for the improvement of the high school curriculum? These questions and many others are being asked by those concerned with the direction of the American high school.

The primary task facing our high schools is the unfinished business of sustaining and diffusing the many achievements found in our better schools and of moving ahead to complete a quality program of universal youth education. This program must provide the kinds and excellence of educational experiences that will challenge and develop all the abilities of all youth. What are the new directions for such a program? I shall indicate four approaches which I believe will prove effective in the improvement of the high-school curriculum, and point out what seem to me to be the reasons why such directions are important.

First, THE TRADITIONAL STRUCTURE OF THE CURRICULUM, CONSISTING OF A FEW REQUIRED COURSES AND SEVERAL ELECTIVES, SHOULD BE REPLACED BY A NEW DESIGN PRO-

VIDING A BALANCED PROGRAM OF GENERAL AND SPECIALIZED EDUCATION.

The most crucial and pressing curriculum problem in most high schools is that of the illogical and loose structure of the program. Separate curriculums, majors and minors, and constants-variables and electives are but feeble efforts to improve a confused and confusing organization. Discrete subject courses have been and are today "the organizational building blocks of our educational program for youth." Austin points out that we have found it convenient to divide areas of knowledge into somewhat comparable units (in the typical large high school the proliferation of courses has proceeded at such a pace that it is not uncommon to find as many as 250 courses being offered) and to use such units as evidence of desirable educational outcomes as currency in the transfer of pupils between institutions and entrance to college. This educational bill of fare, cafeteria style, has been below the calorie requirement of many high-school pupils. The reasons are usually clear; there is an absence of essential requirements and direction; testing and counseling services are most inadequate; and the pupil's appetite for learning has been thwarted.

What should be the structure of the curriculum? The effective high-school curriculum will organize all educational experiences into mutually supportive programs of general and specialized education. The role of the school is to create social unity and also to develop the individual to his maximum potential. Thus the school must provide both unified and differentiated education.

A well-balanced program of secondary education should include as one of its two main ingredients a unified curriculum to meet the needs of all youth and of society. Persistent problems and common interests of pupils are essential guides to essential learning experiences for all youth. Because youth from all segments of American life attend our schools, provision must be made for the development of social competencies. For most youth, the early years of secondary education will largely be devoted to this unified education, while in the later years more emphasis will be put on specialized education. Most of the content should be from the fields of English, social studies, mathematics, and science, usually in that order. The content from whatever subject field should not be an isolated body of knowledge, but an essential phase of a unified program that contributes significantly to the development of the common, unspecialized competencies of youth as persons and as citizens.

Specialized education must also be an integral and coordinated part of the high-school curriculum. The varying abilities, interests, and aspirations of youth require a wide variety of educational experiences. The specialized offerings should be roughly of two types: courses organized into a defined sequence of work in preparation for a vocational field or for

entrance into an institution for further study, and a limited number of more flexible courses that satisfy avocational or personal interests. Recognized need, individual interest, desire to achieve, and college and job requirements should establish different and usually higher standards for pupils than those expected in required programs of general education.

Such a curriculum design will serve the many purposes of society and youth, including the common purpose of integrating education to insure social stability and balance, and the several purposes of individual pupils for the realization of their vocational, educational, and avocational goals. While this discussion is not concerned with either staffing or scheduling the program, the belief can be expressed that such an organization of the curriculum will facilitate the use of large blocks of time for the program of general education and probably will encourage greater continuity in the study of college-preparatory and vocational courses in the program of specialized education.

The second direction is that THE CURRICULUM OF THE HIGH SCHOOL WILL BE MORE SENSITIVE TO ECONOMIC, POLITICAL, AND SOCIAL FORCES AND TO OUR NATION'S ROLE IN WORLD LEADERSHIP AND THESE INFLUENCES WILL BE REFLECTED IN THE PROGRAM OF YOUTH EDUCATION. Knowles writes that we have not reached the age of federal "control" of all education, but we certainly have reached a stage of federal "influence" in our nation's education. It is quite clear that our schools are an integral part of the strategy of this country's conduct of the cold war. These influences are felt in the promotion of more widespread and improved teaching of science and mathematics, in the urging of greater emphasis on quality in education, and the encouragement to more able students to continue their education. The expansion and improvement in foreign language instruction and a concern for more and better teaching about the world and its people, particularly non-western cultures, are other indications of the impact of current forces and trends upon the school curriculum.

There will be greater standardization of the curriculum in view of the developing homogeneity of American life and the increasing mobility of our population. New and improved materials of instruction are being developed increasingly by educational organizations, foundations, and other agencies. Improved teaching methods, enhanced by many electronic and mechanical aids, will result in more effective instruction. The higher qualifications required for American business and industrial employment will clarify and strengthen the place of technical and vocational education in the program.

What are the implications of education as an instrument of national policy? Does this mean different controls? New demands? Can the high-school curriculum adjust and adapt itself more readily to changes on the

local, national, and international levels? This direction for the curriculum obviously raises more questions than it solves. It is high time that educators and other citizens begin to think and plan about their local schools as instruments of national policy.

The third direction is that OUR EDUCATIONAL SYSTEM IN THIS COUNTRY IS BECOMING MORE NEARLY AN ARTICULATED SYSTEM OF EDUCATION AND THIS REQUIRES A HIGHER DEGREE OF CURRICULUM ARTICULATION WITH THE ELEMENTARY SCHOOL AND WITH THE COLLEGE. Bowles reminds us that secondary education and higher education together must accept the fact that a new continuum of education has been established in America, and that as a result of this continuum we are in the process of establishing the mean level of education at a point beyond high school graduation.

Preparation for college is again, and will become more so, a major function of secondary education. There is a pressing need for a new emphasis in both the purpose and program in most of our high schools. The decline in the per cent going to college during the first half of our century was generally accepted as the high school moved ahead in the realization of its goal of universal youth education. It brought with it a change both of emphasis and direction in the purpose and program of the secondary school. The high school talked about its social responsibility and implemented its philosophy by developing comprehensive high schools with many multi-purpose curriculum patterns to satisfy the needs of all youth. The high school freed itself from so-called college domination; it sloughed off its former emphasis upon college preparation and assumed a different task of preparation for immediate employment. The needs of the college-bound student were given less attention than the efforts to improve the school experiences of work-bound youth.

Today the per cent of high school graduates going to college is approximating 50 per cent with a predicted figure considerably higher in the foreseeable future. Preparation for college is again becoming a major function of secondary education. There is a need for an increase in both the quantity and quality of college-preparatory courses. Many more students should be dealing in depth with such disciplines as the foreign languages, mathematics, science, and English composition. Standards for scholastic achievement for college-bound pupils must also be raised. The Advanced Placement Program is a most successful approach to school-college articulation in curriculum. There is the need for high schools through their state, regional, and national associations to cooperate with similar organizations in higher institutions in an action program to define their tasks and responsibilities and to develop programs and services that will insure a smooth and successful transition from high school to college.

Problems of articulation in curriculum content are all too common in

the transition from the elementary school to junior high school, and from junior high school to senior high school. Some progress is being made in some communities particularly in the continuity of learning experiences for gifted pupils. Considerable attention should be given to this problem of curriculum articulation at all levels.

The fourth direction is THE INDIVIDUAL HIGH SCHOOL IS THE PRIMARY UNIT IN CURRICULUM DEVELOPMENT AND THE PRINCIPAL OF THAT SCHOOL IS THE RESPONSIBLE LEADER FOR THE IMPROVEMENT OF THE CURRICULUM. The trend toward greater standardization and uniformity in course content does not lessen the responsibility of the individual school to adapt all phases of the program to the needs of its youth population. Able instructional leadership will develop and utilize the many resources available to effect school improvement and enrich the educational opportunities for youth. An ongoing program of curriculum revision and development must be actively supported by the principal, including the organization and operation of a plan that will involve teachers and laymen and result in the improvement of instruction in the classroom.

Educational leadership will be the primary responsibility of the principal to the end that all the resources of the school contribute to quality education for all youth. In the past his role has been too frequently that of a proprietor primarily concerned with "shopkeeping" rather than a leader whose major responsibility is to help develop a learning environment where youth can move toward the full realization of their potentialities. Under such leadership teachers will be stimulated to provide quality teaching and rewarded for such level of instruction. Pupils will be motivated and encouraged to place a high value on intellectual achievement. The community will be led to respect the scholar as they have lauded the athlete. A quality program with high standards of excellence can result from the persistent efforts of a dedicated faculty led by an able educational leader. Morris reminds us that hundreds, even thousands of boys and girls may or may not discover some of life's richest experiences, depending on how well the principal rises to the full measure of his important calling.

These are a few of the directions that are having their influence upon the educational program of the high school. There is the confident belief that the emerging curriculum in many of our schools will develop the competencies and attitudes in youth that will prepare them to live fully and to work effectively in a complex and dynamic society. America has high hopes and aspirations for its youth. The secondary school has a primary responsibility in the realization of this worthy aim. Only an appropriate and challenging educational program will fulfill this responsibility to youth and to American society.

NEW DIRECTIONS IN SCHEDULING AND USE OF STAFF IN THE HIGH SCHOOL

BY J. LLOYD TRUMP*

This writer is not one of those suddenly-heard-from PS (post-Sputnik) critics of American education. Nor is he interested as some critics are in pushing a single subject as being the most important for the future of this country; nor does he believe broad training in the liberal arts to be the only way to become educated. He is not a hobbyist who believes that all of the educational ills would be solved if the schools would suddenly use one type of visual aid or one approach in teaching young people. Certainly, he does not believe that education in other countries is superior to that of the United States and, therefore, should be imported; he has seen education in many other countries and spent some time abroad in trying to introduce the American concept of education at the secondary level.

Like many other persons, the writer has spent many years of his professional life in attempting to improve the quality of education in the United States. This continuous experimentation in local school districts to improve education has been the essence of the superiority of the American secondary school. In spite of all that the critics say, nowhere in the world have so many been educated so well. Nothing must be done that will destroy the fundamental philosophy in the United States that all children should receive as much training as their capacities would permit.

Those who would improve education experimentally encounter many

* Director, Commission on the Experimental Study of the Utilization of the Staff in the Secondary School, and Professor of Education, University of Illinois. Based upon his remarks to the Conference on New Directions for the American High School, Stanford University, July 8–9, 1958.

barriers to this progress. Some of these are more imaginary than real. For example, although teachers and administrators sometimes stand in the way of progress because they do not wish to change accustomed methods of functioning, or they are not convinced that the changes would actually result in improved practices, most of them are willing to change when they see how it can be done and what the actual results might be; in other words, most professional workers are reasonable people. Another barrier is the matter of cost. This barrier is also more imaginary than real because the history of educational financing in this country bears testimony to the willingness of citizens to vote increased revenues whenever they are involved in the determination of educational policies and are also convinced that what is proposed would result in better training for the children of this land. The barrier of an inadequate school plant is also readily overcome. The history of school building construction in this country bears testimony to the ease with which buildings may be remodeled or new buildings constructed and how willing the taxpayers are to support these ameliorative changes.

Two substantial barriers to improvement exist which have *not* been the object of substantial study and change. Actually there has apparently been little interest or concern about making changes in these areas. The two barriers referred to are (1) changes in the schedule of classes and (2) the methods in which staff members of the school are utilized. This writer would hypothesize that fundamental attacks through experimentation on these two barriers are essential if further steps are to be taken in improving the quality of education in the United States.

The class schedule for high schools has remained substantially the same for many years. All instruction is supposed to take place in standard-sized groups which typically meet 40 to 55 minutes per day, five days per week. Even the introduction of automatic card punch scheduling has done little to change this fundamental pattern. Similarly, the concept that all teachers should perform all services for a given number of students has not been substantially changed in a long time. Experimentation has been largely designed to equalize work loads among teachers, but always with the fundamental point of view that no really substantial individual differences exist among teachers, and that efforts should constantly be exercised to produce as much uniformity as possible among staff. What changes were made were largely in the direction of introducing additional supervisory and administrative personnel and providing clerical assistance to these persons, but little was done to change the role of the classroom teacher except possibly push him farther and farther down the educational hierarchy.

How can substantial breakthroughs be made against these barriers of scheduling and staff utilization? Experimentation is needed in at least

three areas: (1) with regard to a new theory of instruction which would be implemented by substantial changes in the class schedule; (2) changes in staffing which would involve new definitions and types of teacher roles and personnel; and (3) acceptance of new aids to learning which would involve changes and additions in the use of electronic and mechanical avenues to information and understanding. Each of these types of experimental approaches will be described in some detail.

First, let us consider a new theory of instruction. The theory shown in Chart I represents a development from some earlier theories, but, unlike theories of the past, puts instruction in a changed framework. Examination of the chart will show that the teaching-learning process is divided into three phases: Presentation–Assimilation, Study, and Discussion. Various kinds of teaching-learning experiences under each of these three phases are indicated along with the student grouping that it is hypothesized would be most effective and efficient for each phase. An indication is also provided of the types of places where the teaching-learning might take place and the approximate amount of time that might be devoted to each phase.

The theory is based not only on the philosophy and experience of the writer, but also on experimental studies currently going forward in a number of junior and senior high schools in various parts of the United States. The theory is presented not as a finally proven conclusion, but rather as an hypothesis for testing.

Some explanation of the reasons for the student grouping and time allocation should be given. Experience indicates that it is reasonable to suspect that teaching-learning experiences under the *Presentation–Assimilation Phase* will be more effective when done with large groups. This is due to the fact that teachers instructing these large groups will be carefully selected from among those competent and able to do this type of instruction, that the number of hours per week that such teachers are in physical confrontation with groups of students would be reduced because large groups are being instructed part of the time, and that teachers will be able to develop imaginative and effective instructional materials appropriate for large-group instruction. The size of the group is suggested as approximately one hundred because this size group does permit eye-to-eye contact readily between the teacher and pupils. Successful large-group instruction has taken place with groups much larger than this. In small schools, or when other circumstances require, the group might be somewhat smaller. The places suggested are available in most existing buildings; of course, it would be more desirable, if a new building is being constructed, to plan rooms especially for varied-size group instruction. While the time allocation may vary from grade to grade and in different subject

CHART I

THEORY OF INSTRUCTION

PHASES OF TEACHING-LEARNING PROCESS

	Presentation—Assimilation	*Study*	*Discussion*
TEACHING-LEARNING EXPERIENCES	*Introduction:* new topics, units, concepts; relationships; purposes; readiness *Motivation:* reasons; interests; self-analysis *Explanation:* terms, concepts, and ideas *Exploration:* range of learning activities; amplification of interests *Planning:* construct, decisions regarding methods, next steps *Report-digest:* learning shared; drill, memorization, and organization techniques *Generalization:* understandings and appreciations; transfer to other situations *Evaluation:* prior to study; during study; after study and discussion; self— and by teacher; broadly based; variety of types (Related to other two phases)	Read Listen (*e.g.*, tapes, records) View Question Experiment Analyze Think Memorize Create Write Record Make self-appraisal (Related to other two phases)	Group examination of terms, concepts, and ideas Mind with and against other minds Student-centered (Related to other two phases)
STUDENT GROUPING	Large group (approximately 100)	Individual or very small group (not more than 2 or 3)	Small group (approximately 12)
PLACE	Auditorium, little theater, cafeteria, study hall, remodel to join two classrooms, join rooms via television, other large room	Library, laboratory, project and materials centers, experience areas—in or outside school plant	Conference room, classroom
TIME	About 40 per cent	About 35 per cent	About 25 per cent

areas, the figure given is based on present experience and is suggested for further testing.

The important purpose of the *Study Phase* is to place emphasis on the need for growth on the part of students in independent responsibility for learning. Obviously, this growth must be an evolving one from grade to grade and, consequently, the amount of time devoted to independent study would vary somewhat. The important thing is that students must be freed from the constant supervision of teachers in highly structured classrooms so that they can develop independent work habits which are so essential for success in college and work.

The *Discussion Phase* is where students meet in very small groups to develop the kind of interpersonal relationships with each other and with teachers that are discussed very often in the educational literature these days, but which are not achieved frequently because classes are too large.

Examiners of the chart will realize that the class size of twenty-five students which has almost become a fetish in American education may not be appropriate for anything—it is economically inefficient and too consuming of teacher time and energies for the presentation–assimilation phase, it is too highly structured for the study phase, and it is too large for the discussion phase.

Needed changes in the instructional staff in a secondary school are hypothesized in Chart II. Six types of staff members are described. A fundamental purpose of this proposal is to enhance the professional prestige of teachers. The various functions of the different types of staff members are indicated in the chart along with the kinds of training that the different persons might have and the numbers of staff members needed in each category. The numbers of staff members described are based partly on experience and partly on hunches. Undoubtedly, further experimentation may reveal changes in these numbers.

It is interesting to observe that a school staffed in the manner described in Chart II could be financed with the same amount of money being spent for staffing in the present manner and provide an immediate salary increment for professional teachers in the neighborhood of 15 per cent. This would constitute a first step in the development of truly professional salaries for teachers.

The proposal in Chart II does violence to another fetish in American education, namely, that all tasks—clerical, nonprofessional, policing, and others—must be performed by certificated, well-trained professional teachers. If teaching is to become truly a profession, steps will need to be taken to identify those functions and responsibilities that must be done by professional teachers and those that can be done effectively by other types of staff members.

Avenues to learning are identified in Chart III. The basic purpose

CHART II

INSTRUCTIONAL STAFF IN A SECONDARY SCHOOL

Type of Staff	*Functions*	*Training*	*Numbers*
Professional teachers	Plan methods and materials of instruction; teach ideas, concepts, appreciations; direct learning activities; counsel and consult; supervise evaluation; assist with student activities; provide specialized services for which competent and interested; employed on year-around basis if able and interested	Master's degree and beyond with specialization as needed	About 1 for each 40 students aggregate in school
Paraprofessional assistants	Perform specific aspects of teaching below professional level of teachers and above clerks; read and evaluate English themes, science reports, etc.; confer with students about their progress and provide teachers with reports; serve as laboratory assistants; supervise specific out-of-school projects; assist with student activities; typically employed 10–20 hours per week	Usually college graduates, but always trained for specific duties assigned	About 20 hours' services per week per professional teacher
Clerks	Type; duplicate materials; check materials and prepare reports; grade objective tests; keep records; check and distribute supplies; take attendance and perform other routine services; other clerical duties; employed on 40-hour-per-week basis	High school graduate: business education	About 10 hours' services per week per professional teacher
General aides	Control and supervise students on school grounds, in cafeteria, corridors, study halls, auditorium, etc., and at extra-class activity functions; work with students in developing maximum self-controls; assist in student activities when competent; typically employed 10–20 hours per week	High school graduate: general courses some college desirable	About 8 hours' services per week per professional teacher
Community consultants	Lecture; consult; make tapes, records, kinescopes, slides, films, etc.; typically volunteers, although might be paid; used whenever needed or desirable to provide special information and services	Unusual competence; selected from file of available persons	Indefinite, depending on local circumstances
Staff specialists	Special services in such areas as guidance, research, health, reading, aid to exceptional children, audio-visual materials, and curriculum development; supplement work of professional teachers; full-time persons who might serve several schools as needed	Highly trained in area of specialty	Indefinite, depending on local circumstances

CHART III

AVENUES TO LEARNING

Time	Avenues to Learning							
	Teacher	Writing	Printing	Film	Radio	TV	Machines	?
Before Writing								
Before Printing								
Until about 1900								
The 20th Century								

Phases of Instruction	*Illustrative Material Aids*
Presentation—assimilation	Vu-Graph with rear projection to permit writing, printing, pictorial presentations in black-and-white and color with overlays Closed- and open-circuit television to provide magnification, simultaneous instruction in several rooms, etc. Micro-, opaque, and other projectors for specific presentations Electronic tape and other recordings to reduce repetition, provide uniformity for a given group, and permit re-use Film, filmstrips, and slides of various sizes FM radio to permit simultaneous instruction in several rooms Charts, pictures, flannelboards, models, mock-ups, museum materials, etc., for demonstrations Duplicated materials for student use to provide uniformity, involvement, and concrete illustrative materials
Study	All of above that are portable should be available for student use in project areas and materials centers Laboratory supplies and equipment of best design for student use Self-teaching machines—instructions and questions placed on machine in advance by teachers; students are able to follow instructions and test results with a minimum of teacher assistance Self-appraisal tests to permit self-examination and scoring Self-appraisal machines—similar to self-teaching machines
Discussion	All of above that are portable should be available for students to bring to discussion group meetings as aids in explanation and presenting convincing evidence

of this chart is to indicate that students can learn through avenues different from those typically used in schools. In most high schools today the only respectable, everyday avenues to learning are writing, printing, and the voice of the teacher. There is relatively little use on an everyday basis as integral parts of education many of the newer electronic and mechanical avenues to learning. This chart is also based on considerable experimentation and experience. It hypothesizes that these newer avenues

to learning should be as highly regarded in the instructional process as are the traditional avenues.

The Commission on the Experimental Study of the Utilization of the Staff in the Secondary School was created in May of 1956 by the Executive Committee of the National Association of Secondary-School Principals in an effort to encourage experimentation in the area of making better use of the professional competencies of teachers. The appointment of the Commission had its genesis in concern over the shortage of well-qualified teachers and the need for improving the quality of education as seen by the NASSP Curriculum Planning and Development Committee. Annual grants to encourage experimentation have been received from the Fund for the Advancement of Education of the Ford Foundation in 1956, 1957, and 1958. Experimental studies have been undertaken or are currently under way in more than one hundred junior and senior high schools in various parts of the United States. A brief illustration of some of these experiments will be provided in subsequent paragraphs. In addition to a considerable number of articles and mimeographed statements, the Commission has distributed widely two printed publications[1] and anticipates distribution in the near future of two additional ones.[2] From the beginning the Commission has had no preconceived answer to the best way of improving staff utilization. It has been interested in encouraging experimentation in local school systems.

Interesting innovations in scheduling are being experimented with in the eight senior high schools in Jefferson County, Colorado. Under Schedule Type A, a biology teacher, instead of teaching thirty students per class five periods per day, meets all 150 students for one period on Monday, during which he introduces students to the work of the week, gives presentations and demonstrations, shows instructional films, and does other activities appropriate for large-group instruction. On Tuesday he teaches all six periods, meeting on an average twenty-five students per period, with the most gifted being scheduled one period and the most retarded another period. On Wednesday and Thursday he also works all six periods, with each of the Tuesday groups scheduled for a double laboratory period on either Wednesday or Thursday. On Friday he meets one-half of the

[1] *New Horizons for Secondary School Teachers.* 36 pp.. (A discussion guide with about 50 questions and 100 suggested experimental studies.) Available without charge by writing the author, 200 Gregory Hall, Urbana, Illinois.

New Horizons in Staff Utilization. 213 pp. (General articles plus descriptions of experimental studies sponsored by the Commission during the first year of the project, 1956–57.) Available as the January 1958 *Bulletin*, National Association of Secondary-School Principals, 1201 Sixteenth Street, N.W., Washington 6, D.C.; cost, $1.50.

[2] The January 1959 issue of *The Bulletin* of the National Association of Secondary-School Principals will be devoted to reports of Commission-sponsored studies in 1957–1958.

SCHEDULE TYPE A

Biology teacher—replaces 5 periods per day, 30 students per class

Period	*Day in Week*				
	Monday	Tuesday	Wednesday	Thursday	Friday
1	150	(Ave.) 25 (Gift.)	25 (Tuesday	25	75
2		25 (Ret.)	Group)		75
3		25	25	25	
4		25			
5		25	25	25	
6		25			

(Teaches a total of 21 periods per week instead of 25—size of class adjusted to purposes—gives 4 hours extra for professional responsibilities.)

group each of two periods for purposes of bringing together the work of the week, answering any questions that remain, and doing evaluation. Instead of being in physical confrontation with students twenty-five periods per week, this teacher has gained four periods for professional activities. The double period on Wednesday and Thursday provides opportunities

SCHEDULE TYPE B

Replaces 2 teachers, each with 5 periods, 30 students per class, total of 300 students—also presents program for gifted where one teacher teaches 10 students per class

Period	*Number of Students*	*Staff*	
1	100*	Teaching team (80–85 students): experienced teacher, beginning (less experienced) teacher, paraprofessional assistant	Coordinator of gifted (15–20 students)
2	100	Ditto	Ditto
3	100	Ditto	Ditto
4, 5, 6	Experienced teacher free for professional responsibilities. Beginning (less experienced) teacher has two study halls or study hall and class. Coordinator has two other classes or study hall and class.		

* Meet together at start of unit or when necessary.

(Experienced teacher in physical confrontation with student groups only 15 periods per week; beginning teacher has close supervision; coordinator provides program for gifted; paraprofessional is available for subprofessional tasks—provides possibilities of large-group, individual, and small-group instruction when appropriate—total cost no greater than program it replaces.)

for teachers of English, history, and the like to take field trips without disturbing other classes. Variations on this schedule of the biology teacher are used in other departments of the school. This schedule is presented not as a final answer, but as an interesting experimental approach.

In Schedule Type B a different approach is illustrated. At the beginning of a unit in any subject field, a pre-test is given so that students who already know most of the content of the unit, or at least can learn what they do not know under the direction of a coordinator or through independent study, are then taken out of the group and given instruction by the coordinator. The remaining eighty or eighty-five students each period are taught by a teaching team involving an experienced teacher, a beginning or less experienced teacher, and a paraprofessional assistant. This approach is also cited not as a final answer, but as an interesting study. The advantages of this schedule over the traditional schedule are indicated in the chart. Most significant is the fact that the truly professional teacher, responsible for the supervision of the totality of instruction in a subject area, is in physical confrontation with students only fifteen periods per week; he has time to be a professional.

Schedule Type C, taken from Syosset, New York, illustrates a simple

SCHEDULE TYPE C

Period	*Teacher*			
	English	History	Science	Any one of 3 teachers
1	Sect. A	Sect. B	Sect. C	ABC
2	Sect. B	Sect. C	Sect. A	ABC
3	Sect. C	Sect. A	Sect. B	ABC
4, 5, 6	Each has two other classes			

(Three hours available for field trips, special sessions, etc.—regrouping into various-sized classes possible any of three periods—saves time for professional tasks when teacher is free because of regrouping.)

approach that any school could follow. As a first step in improving scheduling and staff utilization, this schedule makes it possible for any teacher to experiment with large-group instruction. When one of the teachers is teaching class sections A, B, and C, the other teachers are free that period to prepare instructional materials for the time when they will be instructing.

A study in Newton High School, Newtonville, Massachusetts, has provided much experience in large-group instruction. More than seven hundred large-group presentations were made in this high school during the

school year 1957–58. As an example, students in sophomore English were assembled in large groups one-fourth of the time for instruction in fundamental aspects of the English program. Similar experimentation has gone forward in mathematics, science, social studies, and music.

A number of experiments involving the use of different types of staff members have also been undertaken. The use of paraprofessional assistants in supervising science laboratories in the Alexander Ramsey High School, Roseville, Minnesota, has made possible opening the laboratories for independent work by interested students after school and on Saturday mornings without adding to the teaching load of certificated science teachers. In Richwood, West Virginia, on the assumption that behind-the-wheel instruction in driver education was at a lower professional level than planning the totality of driver education programs and instructing the theory phase of the course, a bus driver–paraprofessional assistant was used for the behind-the-wheel phase of the work, while the certificated professional did the other phases of teaching. In Newton, Massachusetts, carefully selected and trained paraprofessional assistants graded English themes.

The use of the Encyclopedia Britannica physics course on film developed by Professor Harvey White has been studied experimentally in a number of high schools in Utah. The use of the films made possible instruction by teachers who had not recently had training in physics, or who were otherwise inadequately prepared. The effectiveness of locally prepared teaching tapes has been studied in the Westside Community School, Omaha, Nebraska. When a teacher places on tape in advance of the class all of the instructions he wishes to give, questions he wants to ask, and other ways that he uses his voice, he immediately becomes almost two persons because, while his voice does the teaching on tape, the teacher is available to walk among the students and observe the results of his teaching and help individual students. Also, he is spared the necessity of constant repetition of these matters. Closed-circuit television has been used in staff utilization studies in Evanston, Illinois, and Snyder, Texas.

Teams of teachers involving certificated and noncertificated persons as well as large- and small-group instruction are being experimented with in San Diego, California, in an effort to discover more than is now known about what phases of learning can be handled by different types of persons and in different situations.

What will your school do experimentally to add to the knowledge regarding improved schedules of classes and use of staff? Only through widespread experimentation can these barriers be broken through.

The profession should not be merely defensive in the face of criticism. Aggressive experimentation to seek better ways of doing things is the essence of the American way of life and the bench mark of a true profession.

ANTICIPATED CHANGES IN THE CALIFORNIA HIGH SCHOOLS

BY FRANK B. LINDSAY*

The topic, "Anticipated Changes in the California High Schools," enormously intrigues me because of the premises which underlie its wording. Professor Arthur Bestor, for example, doubtless could identify the undeveloped countries of the mind with presumed deficiencies of current generations of high school graduates. Admiral Rickover might stoutly prescribe massive doses of his favored pressures to be administered to hapless adolescents with no nonsense about it. But here we shall pursue a less spectacular consideration of some of the problems inherent in high school curriculum.

The recent Rockefeller Report conveniently summarizes an aspect of the situation when it states:

> "Between 1870 and 1955, while our population was increasing four times, our high school population was increasing approximately a hundredfold. At the same time that we have forced this expansion upon the system, we have pressed our educators to include in the curriculum an incredible number of subjects, to take over more and more of the functions of the home, and to accept a sense of responsibility for every psychic or civic crisis involving individuals below the age of consent."

This quotation well indicates that public schools do not act as independent agents but necessarily respond to public opinion and the course of events.

* Chief, Bureau of Secondary Education, California State Department of Education. Based upon an address at University of California, Santa Barbara College on July 22, 1958.

Driver education, for example, was not dreamed up by schoolmen seeking to find more busywork for pupils to do; it has been legislated into the curriculum because the people at large through their elected representatives demanded that the high schools try to solve a problem of lessening manslaughter on the streets and highways which traffic enforcement agencies could not contain. Without debating the merits of having high schools take on this further responsibility, at this point we may observe that such critics as Bestor and Rickover have confused symptoms with cause; they should direct their caustic remarks against the public and legislators who make the mandatory courses of study and not ridicule the teachers who earnestly try to carry out provisions of law, as in their capacity of public servants they are required to do.

Courses Now Studied

Before we undertake consideration of what high schools ought to do, we need to survey the facts of what they now are doing. Is it true that California high schools largely fritter away four precious years of their adolescent charges by indulging them in coeducational homemaking, in life adjustment, or other classes of assumed frivolous content? The Bureau of Secondary Education has taken inventory of the studies pursued throughout grades nine to twelve by the graduates of this past June. Here is the picture, in brief.

Of 81,756 graduates of California high schools in June 1958, 69 per cent had studied English a full four years and 29 per cent more had taken English three years. That is, 98 per cent have had three to four years of study of English. If one should inquire why then do not high school graduates invariably pass the Subject A examination, three considerations may be offered in explanation. The first is that California high schools include within their student populations the full range of abilities to be found in the adult population as a whole. Not all students, any more than all parents, possess the mental characteristics which enable some to master grammatical speech and writing. A second consideration is that we do not at present have enough well-trained English teachers to carry the present load; in consequence we overload and overwork those we have. The correction of pupils' compositions is a laborious and time-consuming task. I submit that high school English teachers are doing a magnificent job in the face of adverse circumstances. No verbal Sputnik has dramatized the urgent need we have for able teachers of English. As a public we should not criticize the teaching of high school English but seek to recruit relief shifts of English teachers. A third explanation may exist within the content of English courses themselves. Not all of them should be oriented toward college admission.

In this connection also the Rockefeller Report has a relevant statement:

> "We have made receipt of a college degree an accolade of merit, not in terms of the intellectual achievements which it should symbolize but in terms of the prestige which it attracts. To have received a college degree is becoming an essential qualification for entry into a great many careers, even though that particular career may not utilize any of the particular kind of education which has been received."

This is confirmed by the distribution of employment in California among occupational groups over the past several years. Only 24 per cent actually require some college training successfully to perform the demands of the job while for 57 per cent additional high school would be sufficient.

Our preoccupation with college preparation may blind us to needed services to be performed by high schools essential for the soundness of our economy.

To return to the studies pursued by the 81,756 June graduates of California high schools, however, the returns show that 54 per cent had been exposed to history and geography and allied fields for four years. Another 37 per cent had studied three years of these subjects. Seven per cent had had only two years; and 2 per cent graduated with the minimum of three semesters of United States history and government, including the federal Constitution and state and local government.

In mathematics, graduates who pursued the subject for four years numbered 19.5 per cent. Another 25.7 per cent had three years of mathematics. As we well know, for college admission the minimum offering usually must be first year algebra and plane geometry; 35 per cent additional had these credits on their transcripts. Thus four-fifths of the graduates had studied two to four years of mathematics. In many instances, the other one-fifth had been enrolled in agricultural, homemaking, secretarial, and trade training curriculums where pertinent arithmetic substance is provided through so-called related training to vocational courses.

The percentages of students graduating this June who had studied particular subjects are of some interest. Sixty-nine per cent had passed the first course in algebra; 49 per cent also had taken plane geometry. Twenty-five and one-half per cent who also included a second year of algebra in their schedules may be presumed to be preparing definitely for college. Almost 14 per cent had had trigonometry. Notice should be taken, too, of the 2,171 graduates, or 2.7 per cent, who reported introductory courses in analytic geometry and calculus.

In science the data likewise are revealing, in particular since the graduates had enrolled in these courses long before Sputnik caused a furore.

Although only 13 per cent had studied sciences for four years, and another 20 per cent for three years, we find that 35 per cent of the graduates had taken chemistry and 17 per cent also physics. Biology was the science taken by 67 per cent of the graduates and 51 per cent had taken general science. Physiology, largely of interest to young women, was taken by 14 per cent of graduates. In a high school population ranging from dull to superior, the percentages pursuing chemistry and physics are probably satisfactory. There is need, however, for the development of courses of substantial content in physics and other fields which are not aimed exclusively for pre-engineers and physical science majors.

To sum up, of the June 1958 high school graduates—
69 per cent studied English four years
54 per cent studied social studies four years
19.5 per cent studied mathematics four years
13 per cent studied science four years
and another 29 per cent studied English four years
37 per cent studied social studies three years
25.7 per cent studied mathematics three years, and
20 per cent studied science three years.

In foreign languages, 42 per cent had had the minimum of two years in the same foreign language and 22 per cent more presented either a third year in the foreign language they had been taking or two years in a second foreign language.

It seems evident, therefore, that California high schools provide opportunity for students who desire to pursue "college preparatory" subjects to enroll in these courses. It also seems probable that a majority of students who are capable of pursuing college work include these subjects in their high school schedules. The changes to be anticipated in the high school curriculum would seem not so much to enlarge the offerings available as to direct more attention to the kind of instruction given within the courses.

In laboratory science, as an example, in many high schools the chemistry and physics courses are directed toward the preparation of students who will enter pre-engineering courses. The concerns of young people who may be good college material but who may be aiming toward other professions, as nursing, medicine, law, and business administration, are neglected. The university recognizes the different needs of such students and provides appropriate courses for them; high schools have seldom squarely faced this problem.

In another direction, high schools have failed to construct courses whose content is substantial but whose instruction is directed toward helping noncollege-bound students achieve some intelligent understanding of

science and technology. The same construction of similar courses also needs to be attempted in the other academic fields of mathematics, literature, history, and political science.

The provision of parallel courses for students of differing abilities and aims would enable the superior students to be grouped for better education for college. There is nothing undemocratic about segregating students in terms of their career objectives and in giving them instruction appropriate to these needs. To put into the same section the capable college-bound students with those who need simple applied science, for instance, is to frustrate both groups. In such a class the level of instruction inevitably must become boring to the bright and defeating to the dull.

In the words of Clarence H. Faust, vice-president of the Ford Foundation, ". . . the high school of the future must be 'comprehensive' in a somewhat different sense from that now ordinarily given to the term. It needs to be comprehensive, not by providing, in one institutional arrangement, for college-preparatory, terminal and vocational education, but comprehensive in providing a range of programs (employing appropriately different materials, methods, and pace) for developing in all students up to the limits of their capacity, the knowledge, the insight, the ability to think independently about mankind's individual and collective concerns—thinking that deserves the designation of wisdom."

Psychological Principles to Guide Change

If the high schools of California are to realize this goal, teachers and the public must recognize more fully than has been the case, the significance of certain basic principles of learning. During the past half century psychologists have confirmed through careful experimentation four important discoveries. The first is that no single curriculum is pre-eminently fitted for training the mind. Commonly termed the overthrow of formal discipline, this statement means that high school must provide multiple curriculums properly to serve the varying needs of students for intellectual development.

A second fact is closely related to the first; that is that individuals differ widely in capacities, in rates of learning, and at any given time in readiness to learn. Even among students with superior endowments there are wide ranges of ability to read rapidly, to construct oral and written sentences, to recall memorized data, and to organize assemblies of data into usable patterns. This principle not only emphasizes the necessity for high schools to present a range of study materials and learning experiences to their students but also it cautions educators not to rely too exclusively upon standardized verbal tests to identify capability to succeed in college. Charles F. Kettering of General Motors in a recent article referred to this situa-

tion when he said: ". . . the formal classroom teaches a student to fear failure. If he fails something bad happens to him. He is out. That kind of training is unreasonable. When a young man comes to work for us we assure him that what he does not know will not be held against him, so that he can admit it and not waste time bluffing. In any experiment, we want him to succeed just once and we don't care how many times he fails. . . . We want our inventors to fail intelligently."

The third discovery denies the validity of relying solely upon textbook teaching. It states that the more the situations of learning have elements in common with lifelike applications, the greater is the probability that learning will be retained and usable. Mr. Kettering's remarks, of course, are also relevant in this connection.

And the fourth principle is that learning is a process of individual growth. Each student learns at his own rate, beginning at the point he has already attained, and in his own time. To assume that the members of a class begin the term at a common starting point is an illusion. Implicit also is the conclusion that the more effective the instruction, the wider the spread of achievement there should be at the close of a semester.

The failure which high schools have encountered in instructing their students generally in the academic studies has stemmed from too exclusive reliance upon some single vehicle of presentation, such as recitation from textbooks. The aim of instruction should be to make students capable of independent inquiry and practiced in the skills of conducting research. A single course should not be viewed as the last chance one will have to learn all about a topic. In California, 55 per cent of high school graduates eventually enter some type of collegiate institution. At present the junior colleges enroll three-fifths of all lower division students. In this respect it should be observed that junior colleges are performing a valuable service to higher institutions by redirecting many into terminal and semi-professional curriculums, by screening their transfers, and by rehabilitating those initially lacking prerequisites for professional and university studies in upper division.

Anticipated Changes

The most necessary change to be anticipated in high schools is for these institutions to be freed to become again centers of learning. The public which recently has been critical of the shortcomings of the schools must bear in large part responsibility for the situation. It has been all too convenient to demand that schools perform functions which other community agencies rightfully should assume.

At the University of Chicago's Conference on the American High School last October, Henry Steele Commager read a paper entitled "A

Historian Looks at the American High School," in which he reviewed four historic purposes of secondary schools:

"1. To train citizens competent to govern themselves; . . .
2. To absorb and Americanize millions of newcomers from the Old World and elsewhere;
3. To encourage and strengthen national unity; and
4. To teach the habits and practices of democracy and equality and religious tolerance."

In Professor Commager's opinion the high schools have done very well on the whole. He states, in part:

> "Though the schools are divorced from the church and from formal religion, there has been no failure to inculcate morality. . . .
> "Though required to take all comers, mass education has not meant a serious vulgarization of culture or a serious watering-down of the intellectual content of learning. . . .
> "Though the tasks that confronted Americans—and that appealed for educational support—have been intensely practical, there has not been an overemphasis on vocational education in the American system."

He believes, however, that schools need no longer bear the heavy responsibilities in the non-academic realm which can now be shared with many other agencies: the press, radio, television, movies, youth organizations, and the churches with their enlarged social functions.

Perhaps the major change devoutly to be hoped for is a reformation of the high school teacher. The task is to overcome a parochial outlook. It is easy to understand why the high school teacher honestly comes by his tunnel vision. For his four undergraduate years he has largely devoted his studious efforts to acquisition of such mastery of an academic field as is demanded of a major in the humanities, in social sciences, or physical or biological science. The colleges and universities are to be commended for their efforts to compensate for a provincialism of specialization by requiring in lower division a breadth of courses in the several fields of liberal arts before a student focuses exclusively upon his major.

A high school teacher, however, primarily is one who has found intellectual satisfaction in study within a particular subject field. This is quite as it should be; but to transform such a student into a teacher requires some mastery of additional disciplines. Here it is pertinent to observe that the candidate for a California general secondary credential employs only 15 per cent of his five years of university study in pursuit of courses in education as compared with the one-fourth of his credits given to his

major and another one-sixth to his minor field. Critics of public education who assume that poor teaching in high school may be traced to reduced opportunity to master subject content due to the crowding in of pedagogical courses are obviously in error. Poor teaching has its origin in quite other deficiencies.

A teacher in high school not only must know well his specialty; the day should come when more and more teachers will have added a master's program to their undergraduate preparation. A teacher must not only know, he must know what he knows and, importantly, how to communicate what he knows. When a teacher knows what he knows he is cognizant of the interconnections of his subject among other disciplines. A teacher who can motivate students, in a biology class, for instance, must be able informally to point out on occasion how biology illuminates many issues of community health and disease, of conservation and urban planning, so that his students may employ biological principles to make intelligent decisions about civic and international problems. Such a biology teacher might even lend a helping hand to the mathematics teacher by showing that the distribution of dominant and recessive traits through successive generations is a special case of binomial expansion.

In this respect, the teacher is in the same predicament as the fledgling engineer or physician. He must not only master knowledge; he must master an art of utilizing knowledge in application to particular problems. That the teacher's material and design are high school students and their learning instead of a highway or a bridge, or an epidemic of measles, in no way alters the essential parallel.

This brings us face to face with the utility of courses in education to insure a reasonable probability that a teacher will be able to instruct. Engineers deal with strengths of materials, their ductility, elasticity, and liimts of resistance to pressures and other strains induced by events. A candidate for teaching must learn what psychologists have found out about adolescents, how they best learn, and what conditions impede their learning. In high school every pupil deserves opportunity to work up to his capacity. Psychologists have proved that extrinsic factors are poor substitutes for the discipline inherent in subject matter itself when students discover what history or plane geometry are all about. Adolescents are adventurous and will devote enormous energy to undertakings which make sense to them. It is a sad commentary upon our lack of insight that so many of the activities which enlist wholehearted student support have grown up outside the classroom and in competition with it instead of being employed as vehicles for intellectual achievement. Our reliance upon verbal memorization would be merely pathetic if it were not so significant in smothering budding interests and in driving students away from studies for which they have unrealized capacity.

Again, to quote briefly from the Rockefeller Report:

> ". . . the development of the individual's potentialities occurs in a context of values. Education is not just a mechanical process for communication to the young of certain skills and information. It springs from our most deeply rooted convictions. And if it is to have vitality, both teachers and students will be infused with the values which shaped the system."

Three changes have been alluded to which seem to be indicated if the American comprehensive high school is to equip its students for life in the United States today. A first one was the review of subject content to eliminate the obsolete and to reorganize significant concepts into an order which will give them adequate emphasis. This is already being undertaken, for example, by the American Institute of Physics, the American Chemical Society, and the Institute of Biological Societies. There are similar stirrings among humanists and social scientists. Even in mathematics there are heartening efforts to rid this ancient discipline of the encrustations of past millennia.

A second needed change is to rid ourselves of the myth of the college preparatory course. There is no single curriculum which equips all students with the wide range of objectives they have to succeed in college. The would-be engineer and the would-be businessman have only a limited number of common courses which are prerequisite for study in both professions. Therefore, there should be several courses in a subject field, each of substantial content, but designed for young people of differing purposes and abilities. The academic studies represent important human heritages; they are too precious to be restricted to the fraction of students who will continue formal schooling at college. They must be reconstituted likewise to serve the general citizen. As Robert Hutchins states, "The object of liberal education in youth is not to teach the young all they will ever need to know. It is to give them the habits, ideas, and techniques that they need to continue to educate themselves. Thus the object of formal institutional liberal education in youth is to prepare the young to educate themselves throughout their lives."

As we try to effect a third change in the high school, to rescue it from its activities and to restore it as a center of learning, let us not commit the equally serious error of aping the lower division instruction of colleges. High schools are for adolescents as college properly is for adult human beings. When I was a young teacher I read a book by James Harvey Robinson, the historian, which I found helpful in teaching boys and girls. He wrote:

> "There are four historical layers underlying the minds of civilized men—the animal mind, the child mind, the savage mind, and the

> traditional civilized mind. We are all animals and can never cease to be; we were all children at our most impressionable age and can never get over the effects of that; our human ancestors have lived in savagery during practically the whole existence of the race, . . . and the primitive mind is ever with us; finally, we are all born into an elaborate civilization, the constant pressure of which we can by no means escape. . . . In all our reveries and speculations, even the most exacting, sophisticated, and disillusioned, we have three unsympathetic companions sticking closer than a brother and looking on with jealous impatience—our wild apish progenitor, a playful or peevish baby, and a savage. . . ."

Adolescents exhibit these in turn in bold relief. Clearly, to conduct such a circus, the high school teacher must know more than tricks of subject matter.

As I have observed California high schools from the State level for two decades, I have seen them exhibit inherited immunity to progressive education, stoutly resist a mild attack of life adjustment education, and only partially accede to the imperative needs of youth.

Nevertheless, as current enrollments show, it required no Sputnik to make their students respond to the general need for more attention to be paid to English, mathematics, and science. It was during the Commonwealth when Britain was menaced still by declining Spain, insurgent France, and even Dutch seapower that John Milton wrote: "I call that a complete and generous education which fits a man to perform justly, skillfully, and magnanimously all the offices both private and public in Peace and War." May not our high schools, advised by competent authorities in the biological, physical, and social sciences, be moving toward fulfillment of that very function as Americans grope their way toward self-discipline and responsibility at home and abroad?

MUSIC IS THE FOOD OF SCIENCE

With American education undergoing intense evaluation, it is significant that considerable attention is being given to the importance of music in helping to develop creative minds. While on one hand there are pressures for the mass production of engineers, technicians, and scientists to meet the "quota" set by the number produced each year by Russia, cooler and wiser heads have made it clear that quality is much more vital than quantity; that the good scientific mind must be well balanced and creative, rather than merely filled with formulae and theorems; and that development of this type of mind requires emphasis on the subjects that nurture creativity.

—Jay L. Kraus, in *Music Journal*, June-July 1958

NEW PUBLICATIONS

Current books and other materials recently received in the *Journal* office:

Abraham, Willard. *Common Sense About Gifted Children.* New York: Harper and Brothers, 1958. xii + 268 pp. $3.75.

American Policy and the Soviet Challenge. Series editor: Robert L. Goldberg. Science Research Associates. 1957. Foreign Relations Series. 65 pp. Experimental edition.

Armstrong, John P. *Chinese Dilemma.* Science Research Associates. Foreign Relations Series. 1956. 65 pp. Experimental edition.

Berkson, I. B. *The Ideal and the Community.* New York: Harper and Brothers, 1958. xii + 302 pp. $4.50.

Billett, Roy O., and Yeo, J. Wendell. *Growing Up.* Boston: D. C. Heath and Company, 1958. ix + 454 pp. $4.00.

Blueprint and Experience. Addresses and Summary of Proceedings of the Conference on University Contracts Abroad, Denver, Colorado, November 14–15, 1957. Edited by Richard A. Humphrey. Washington, D.C.: American Council on Education. 1958. vii + 47 pp.

Chase, Francis S., and Anderson, Harold A. *The High School in a New Era.* Chicago: University of Chicago Press, 1958. 465 pp. $5.75.

de Francesco, Italo L. *Art Education.* New York: Harper and Brothers, 1958. xviii + 652 pp. $6.75.

Detjen, Mary F., and Erwin W. *Your High School Days.* New York: McGraw-Hill Book Company, Inc., 1958. ix + 246 pp. $3.96.

Deutsch, Harold C. *Our Changing German Problems.* Science Research Associates. 1956. 65 pp. Foreign Relations Series. Revised edition.

Diggins, Ronald V., and Bundy, Clarence C. *Sheep Production.* New York: Prentice-Hall, Inc., 1958. 1st edition. ix + 369 pp. $4.90.

Eisman, Louis, and Tanzer, Charles. *Biology and Human Progress.* New York: Prentice-Hall, Inc. 2d edition, 1958. xiv + 544 pp. $4.80.

Ekblaw, Sidney E., and Mulkerne, Donald J. D. *Economic and Social Geography.* New York: McGraw-Hill Book Company, Inc., 1958. 415 pp.

Fancher, Charles, and Gallagher, J. Frances. *Business Fundamentals for Everyone.* 2d edition, 1958. New York: Prentice-Hall, Inc. 552 pp. $3.60.

Faunce, Roland C., and Bossing, Nelson L. *Developing the Core Curriculum.* 2d edition, 1958. New York: Prentice-Hall, Inc. xiii + 386 pp.

Fifty-seventh Yearbook of the National Society for the Study of Education. Edited by Nelson B. Henry. University of Chicago Press, 1958. Part I: *Basic Concepts in Music Education.* xi + 362 pp. $4.00. Part II: *Education for the Gifted.* xi + 420 pp. Part III: *The Integration of Educational Experiences.* xi + 263 + xcix pp.

Glennon, Vincent J. *The Road Ahead in Teacher Education.* Syracuse: Syracuse University Press, 1957. 56 pp. Bound, $2.00; paper, $1.00.

Gramet, Charles, and Mandel, James. *Biology Serving You.* New York: Prentice-Hall, Inc., 1958. vii + 616 pp.

Haas, Kenneth B., and Perry, Enos C. *Sales Horizons.* New York: Prentice-Hall, Inc., 1958. xi + 404 pp. $3.56.

Hunnicutt, C. W., and Iverson, William J. *Research in the Three R's.* New York: Harper and Brothers, 1958. xvi + 446 pp. $6.00.

Johnson, Earl A., and Michael, R. Eldon. *Principles of Teaching.* Boston: Allyn and Bacon, Inc., 1958. ix + 502 pp. $5.50.

Joint Council on Economic Education. *An Annotated Bibliography of Materials in Economic Education.* Joint Council on Economic Education, 2 W. 46th St., New York 36. 1958. 44 pp. 50c.

Jones, S. Shepard. *America's Role in the Middle East.* Science Research Associates, 1958. Foreign Relations Series. 67 pp.

Joseph, Margaret, and Keiffer, Mildred. *Basic General Mathematics.* New York: Prentice-Hall, Inc., 1958. 1st edition. iv + 458 pp. $3.52.

Klausmeier, Herbert J. *Teaching in the Secondary School,* with accompanying instructor's manual. New York: Harper and Brothers, 1958. xii + 499 pp. $5.00.

Latimer, John F. *What's Happened to Our High Schools?* Washington, D.C.: Public Affairs Press, 1958. vi + 196 pp.

Lewis, Norman. *How to Read Better and Faster.* New York: Thomas Crowell Company, 1958. 3d edition. xvii + 398 pp. $2.50.

Marcus, Abraham. *Basic Electricity.* New York: Prentice-Hall, Inc., 1958. xv + 493 pp. $4.85.

Malsbary, Dean R. *Spelling and Word Power.* New York: Prentice-Hall, Inc., 1958. x + 131 pp. $2.48.

Mayer, Frederick. *New Directions for the American University.* Washington, D.C.: Public Affairs Press, 1957. viii + 52 pp. $2.50.

Meltzer, B. N., Doby, H. R., and Smith, P. M., editors. *Education in Society: Readings.* New York: Thomas Y. Crowell, 1958. xiv + 498 pp. $3.25.

Muldoon, Mary. *Learning to Teach.* New York: Harper and Brothers, 1958. xiii + 287 pp. $3.50.

Offerings and Enrollments in Science and Mathematics in Public High Schools. U.S. Department of Health, Education, and Welfare, Washington, D. C.: Government Printing Office, 1957. Pamphlet No. 120. ix + 44 pp.

Ogilvie, Vivian. *The English Public School.* New York: Macmillan Company, 1957. 1st edition. xii + 228 pp. $6.00.

Olson, Delmar W. *Woods and Woodworking for Industrial Arts.* New York: Prentice-Hall, Inc., 1958. xi + 233 pp. $4.00.

Pepyne, Edward W., Mann, William A., Hartsell, Horace C. *Better Driving.* New York: Prentice-Hall, Inc., 1958. ix + 130 pp. $1.28.

Platig, Raymond E. *Our American Foreign Policy.* Science Research Associates, 1956. Foreign Relations Series. Revised edition. 76 pp.

Reeder, Ward G. *The Fundamentals of Public School Administration.* New York: Macmillan Company, 1958. 4th edition. xi + 625 pp. $6.00.

Siks, Geraldine. *Creative Dramatics: An Art for Children.* New York: Harper and Brothers, 1958. xxi + 472 pp. $4.50.

Smith, Nila Banton. *Be a Better Reader,* Book I. New York: Prentice-Hall, Inc., 1958. 128 pp. $1.32.

Smith, Nila Banton. *Be a Better Reader,* Book II. New York: Prentice-Hall, Inc., 1958. 128 pp. $1.32.

Smith, Nila Banton. *Be a Better Reader,* Book III. New York: Prentice-Hall, Inc., 1958. 128 pp. $1.32.

Starratt, Edith E., and Lewenstein, Morris. *Our American Government Today.* New York: Prentice-Hall, Inc., 1958. 1st edition. xi + 516 pp. $4.48.

Stuart, Esta Ross, and Gibson, E. Dana. *Typing Employment Tests.* New York: Prentice-Hall, Inc., 1958. ix + 100 pp. $1.68.

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